

national

SAFETY NEWS

MAY 1954



Letting in the light



IN THIS ISSUE

We've Learned from Failures
Head Protection in the Twentieth Century
Wire from Washington

At FORD MOTOR COMPANY'S
Aircraft Engine Division, Chicago

the unexpected
doesn't catch them unprepared

7 M·S·A PNEOLATORS

provide stand-by protection
for Asphyxia emergencies

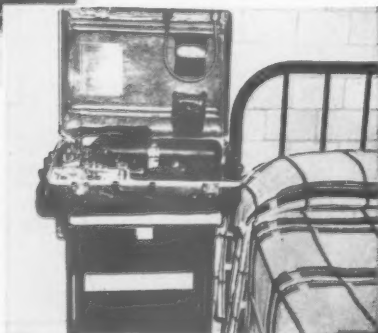
In this Ford Motor Company plant, respiratory protection for employees goes an all-important step beyond the use of respirators, masks and warning devices. Ford safety planners have also installed seven M.S.A. Pneolators for emergency use in any cases of asphyxiation might occur.

These M.S.A. Pneolators are placed in readily accessible locations throughout the plant and carried as standard equipment on the company's ambulance and fire trucks.



← Fire trucks at Ford plant carry M.S.A. Pneolators for protection in asphyxia cases.

→ Bedside Pneolator installation in one of Ford's first aid stations. Ready for instant use for bed patients, or can be carried outside for use where needed.



Call the M·S·A man on your every safety problem
... his job is to help you.

M·S·A
SAFETY EQUIPMENT HEADQUARTERS
M·S·A



The M·S·A Pneolator assures maximum chances of recovery

This portable, effective unit automatically inflates the lungs with selected amount and pressure of oxygen—continuously, rhythmically, safely. There is no suction cycle—the Pneolator is the nearest mechanical approach to natural breathing. Immediate change over to inhalator phase when patient starts breathing.

Note: The first few minutes after breathing has ceased are the most critical. Manual artificial respiration should be started and continued until the Pneolator is in use.

MINE SAFETY APPLIANCES COMPANY

201 North Braddock Avenue, Pittsburgh 8, Pa.

At Your Service: 76 Branch Offices in the United States

MINE SAFETY APPLIANCES CO. OF CANADA, LIMITED

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WILLSON

SAFETY SPECTACLES

...Everything you want in

- PROTECTION
- COMFORT
- STYLE

STYLE WB—Distinctive bronze-color butyrate frame. Non-flammable. Toughest plastic made for spectacles. Standard cable or spatula type Hi-Line® temples. Light, sturdy, handsome. (With matching sideshields, Style WBS.)



STYLE A—Strong metal frame, on-line temples, with metal reinforcing bar or pearloid brow rest. Rocker nose pads. Exceptionally comfortable. (With sideshields, Style AS.)



STYLE AH—Single-bridge metal frame with Hi-Line® temples. Rocker nose pads. Light yet safely sturdy. (With sideshields, Style AHS.)



STYLE AV—Modern metal frame with Hi-Line® temples, metal reinforcing bar. Rocker nose pads add extra comfort. A popular style of outstanding value. (With sideshields, Style AVS.)



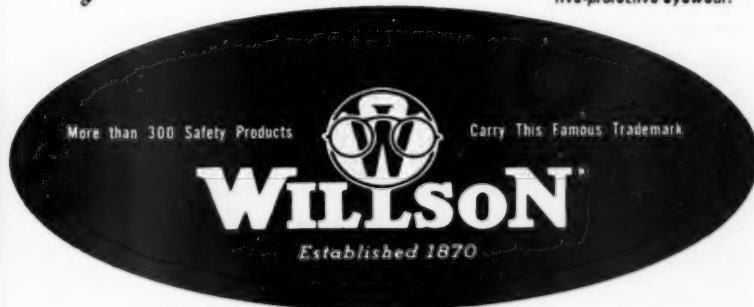
STYLE WK—Sturdy flesh-color butyrate frame—"keyhole" bridge. Choice of spatula or half-plastic, half-cable temples. Adjustable for perfect fit. (With sideshields, Style WKS.)

Write for Willson Spectacle Data Chart and outline of our complete program on corrective-protective eyewear.



ASK YOUR WILLSON DISTRIBUTOR to show you the Willson Sample Kit of Safety Spectacles which includes lenses, frames and sideshields available.

National Safety News, May, 1954



WILLSON PRODUCTS, INC., 205 Washington Street, Reading, Pa.

national Vol. 49, No. 3

SAFETY NEWS

Published monthly by National Safety Council

MAY 1954

THE COVER: Washing thousands of windows on a regular schedule is one of the most important activities of the housekeeping program at the plant of the Studebaker Corporation at South Bend, Indiana. See page 26.

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the first nylon mesh safety shoe



Stock No. 1621 A

built to work shoe standards

We have had no confidence in the *unlined* nylon mesh shoe for strength or safety — and so have never featured it. Now we offer a mesh oxford that's lined as a safety work shoe should be—**but lined with nylon mesh itself!** It's just as cool and breezy as an unlined mesh shoe. But the double thickness of tough nylon strands is fully as strong as the ordinary thickness in leather. No man is taking a chance with his feet in wearing it on the job.

Just as cool but
DOUBLY STRONG —
NYLON MESH
lined

LEHIGH

SAFETY SHOE COMPANY

ALLENTOWN, PA.

REGIONAL OFFICES
showing and stocking address
FIRST and NINTH STS.
EMMAUS, PA.

what gal would guess?

These two new casuals are safety shoes!



#WFL-3

Moccasin style built on heel-hugging last. Lined steel toe box. Neoprene crepe sole and heel.

#WFS-5

Brown and white saddle oxford. Lined steel toe box. Neoprene crepe sole and heel.

To look at these two new Thom McAns for women, you'd never think they were safety shoes. They look as if they'd been designed for some swank summer resort instead of a factory floor. They have sports shoe smartness and casual good looks. But make no mistake — these are real Thom McAn safety shoes right down to the steel caps under those trim toes. High in style and low in price, they'll set the fashion for women workers everywhere this Summer.

SOLD 2 WAYS

1. At Thom McAn stores.
2. Direct to your plant.

Write today for details of this last-named service and Thom McAn's 4-way employee purchase plan, plus descriptions of the full line of Thom McAn Safety Shoes to . . .

THOM McAN SAFETY SHOE DIVISION
25 West 43rd St., New York 36, N. Y.

Thom McAn
SAFETY SHOES

National Safety News, May, 1954



COOL HEADS IN "HOT SPOTS" WON'T LET YOU DOWN

On jobs where the air is foul or hot, men can't be blamed too much for letting up now and then. If you want to keep their efficiency and morale high, feed them better air.

Employers have learned the value of putting Coppus Blowers and Ventilators on the job . . . in confined areas and near furnaces or hot processes. The men work faster, do better work, work longer without fatigue — and appreciate the more comfortable working conditions.

Give some thought now to the "hot spots" in your plant. There is a

Coppus Blower for practically any requirement — Cable Manhole and Tank Ventilators, Boiler Manhole Blowers and Exhausters, Heat Killers, Shiphole Ventilators, etc. The Coppus "Blue Ribbon" is your assurance of design and construction planned for plenty of severe service. Check and mail the coupon for specific information. Coppus Engineering Corp., Worcester 2, Mass. Sales Offices in THOMAS' REGISTER. Other "Blue Ribbon" Products in BEST'S SAFETY DIRECTORY, CHEMICAL ENGINEERING CATALOG, REFINERY CATALOG.



ANOTHER
COPPUS
"BLUE RIBBON" PRODUCT

COPPUS ENGINEERING CORP., 125 PARK AVENUE, WORCESTER 2, MASS.

Please send me information on the Blowers that clear the air for action.

- | | | |
|--|--|---|
| <input type="checkbox"/> in tanks, tank cars, drums, etc. | <input type="checkbox"/> on steam-heated rubber processes. | <input type="checkbox"/> general man cooling. |
| <input type="checkbox"/> in underground cable manholes. | <input type="checkbox"/> on boiler repair jobs. | <input type="checkbox"/> around cracking stills. |
| <input type="checkbox"/> in aeroplane fusilages, wings, etc. | COOLING: | <input type="checkbox"/> exhausters, welding fumes. |
| <input type="checkbox"/> on coke ovens. | <input type="checkbox"/> motors, generators, switchboards. | <input type="checkbox"/> stirring up stagnant air wherever men are working or material is drying. |
| | <input type="checkbox"/> wires and sheets. | |

NAME

COMPANY

ADDRESS

CITY

(Write here any special ventilating problem you may have.)

What is there about Wausau, Wisconsin, that makes it the ideal home for one of the world's most important insurance companies?

Employers Mutuals of Wausau invited an Atlanta air line president to visit its hometown and find out.



"... an unusual distinction for a clergyman." Rev. Ray Kiely (left) and Mr. Woolman.

I'd heard about the Reverend Ray Kiely, pastor of one of Wausau's 33 churches. He had been named Man of the Year for Wisconsin by the Junior Chamber of Commerce. This is an unusual distinction for a clergyman, and I wanted to meet him.

He told me that Wausau businessmen often come to him to talk about applying the Golden Rule to their companies' affairs. That is a good commentary on the type of men they are in Wausau.

This impression was strengthened when I met Arnie Plier, head of Wausau's D. J. Murray Manufacturing Company. He greeted us cordially—dressed for comfort in a flannel shirt. Our chat went far beyond air travel and the big paper-making machines his company produces. Mr. Plier was as proud of the African violets on his window ledge as I am of the orchids I grow—and we enjoyed swapping information about our hobbies. You do things like that in Wausau.

I found the same refreshing attitude in Employers Mutuals' people. Their policyholders buy something more than insurance. They buy a way of doing business that is good. It springs from a deep belief in doing things right and well. And that, I think, springs from the good life of Wausau itself.

Employers Mutuals of Wausau are "good people to do business with."

There's a little bit of Wausau on the sidewalks of New York, and in all 89 cities where this company has offices. We have a reputation for fairness that bends over backwards to give our customers the protection they expect; and for unexcelled claim service. We are one

of the world's largest writers of workmen's compensation insurance and handle all lines of casualty and fire insurance as well.

We believe that insurance works at its best when it protects against the large losses that are unpredictable—rather than the small losses that are to be expected. For example, we are one of the first companies to offer group hospitalization insurance with new high-

maximum benefits to take care of major expenses. This is made possible by a "deductible" provision that keeps premiums within reason (similar to the deductible-type automobile insurance you buy).

May we show you how we can tailor such a plan for you? You'll find us good people to talk business with. Phone our local office, or write Wausau, Wisconsin.

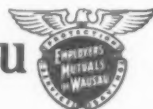
Wausau Story

By C. E. WOOLMAN, President, Delta-C&S Air Lines, Atlanta



"... a deep belief in doing things right." Mr. Woolman (right) visits Wausau's A. W. Plier.

Employers Mutuals of Wausau



Combat **HEAT FATIGUE** with



PEP-UP[®] IMPREGNATED **salt tablets**

EACH SALT CRYSTAL
INDIVIDUALLY COATED

Rx To increase Vigor and Vitality, Relieve Fatigue, Dizziness and to prevent Heat Prostration caused by loss of salt through excessive perspiration.

*Will not cause
Nausea or
Stomach Distress*

Releases Salt Immediately!

(Not Enteric Coated)

- Controlled (slow) dissolving eliminates nausea.
- Starts dissolving immediately.
- Dissolves completely in about 100 minutes.
- No delay in getting salt into system.
- Withstands high temperatures and rough handling.
- Can be stored for long periods without deteriorating.
- Will not absorb moisture from air and clog dispensers.
- The Formula used for producing Impregnated Salt tablets was developed at the United States Naval Medical Research Institute. The tablets meet government specifications for Type III, Class C Impregnated Salt tablets (specifications set forth in Federal Standard Stock Catalog No. SS-S-31d, Section IV (part 5), dated September 11, 1951).

Working for You
to Make Safety Work

Expendable Dispenser

PEP-UP Impregnated Salt Tablets come to you in sanitary, factory-sealed Dispensers at no extra cost. **T H R O W AWAY DISPENSER WHEN EMPTY. HANG UP A NEW ONE.**

Save the expense of purchasing, servicing and replacing individual dispensers.



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STRONGER LIGHTER WEIGHT *Stainless* STEEL

ALFCO SODA-ACID FIRE EXTINGUISHER

with new unremovable *label in distinguish-
ing color... an integral part of the
shell... more legible, more easily
cleaned.

The finest 2½ gallon Soda-Acid extin-
guishers in their price class! All welded
construction, elbow and collar silver
fluxes, corrosion resistant both inside and
out... a revolutionary improvement in
fire extinguisher construction.

Soda-Acid 5S2, for Class A fires (Paper, Wood, Rubbish,
etc.); Firefoam 5F2, for Class A fires and Class B fires
(Flammable Liquids, Gasoline, Oil, Grease, Paint, etc.);
and Water Type 5W2, for Class A fires.

Approved by Underwriters' and Factory
Mutuals Laboratories

TESTED TO 500 LBS.

*Panel Patent 2,635,376



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AMERICAN-LAFRANCE FOAMITE
ELMIRA NEW YORK U.S.A. Corporation

MODEL **ALFCO** 5S-2
AMERICAN-LAFRANCE FOAMITE Corporation
SODA-ACID
FIRE EXTINGUISHER
107 TESTED TO 500 LBS.
**FOR FIRE
TURN BOTTOM UP**
1 GRASP
NOZZLE
AS
SHOWN
REMOVE
YOUR
FINGER
2 STILL
HOLDING
NOZZLE
EASY
TO
FIRE
3 AT THE FIRE - GRASP
BOTTOM HANDLE
WITH FREE HAND
TURN
BOTTOM
UP
4 KEEP SAFE DISTANCE FROM FIRE. DIRECT STREAM
AT BASE OF THE FIRE. IF OUTDOORS, APPROACH
WITH WIND AT YOUR BACK
TO CHARGE
FOLLOW INSTRUCTIONS PRINTED ON RECHARGE CONTAINER
2½ GALLON ALFCO SODA-ACID 2½ GALLON CHARGE ONLY
RECHARGE IMMEDIATELY AFTER USE. IF NOT USED, DISCHARGE AND
RECHARGE YEARLY. RECORD DATE ON TAG ATTACHED. EXTINGUISHER
SHOWING EVIDENCE OF DAMAGE IS UNSAFE FOR USE AND SHOULD
BE RETURNED TO THE MANUFACTURER FOR EXAMINATION
PROTECT FROM FREEZING
PANEL PATENT 2,635,376

At last...a proven better way to kill Diesel Exhaust Fumes!

NEW OCM DIESELER

Cleaner, safer air wherever you run a 4-cycle diesel engine — better control of noxious diesel exhaust fumes — that's what this tremendously important new catalytic invention means to you today.

The OCM Dieseler reduces — below objectionable levels — dangerous hydrocarbons and carbon monoxide in exhausts from all 4-cycle diesel engines. Compact catalytic units "burn out," by catalytic reaction, 65-85% of the unpleasant, harmful fumes — 80-90% of the dangerous carbon monoxide — whenever your engine is operating at over 60% load.

Think what this means almost everywhere diesel engines are used!

Now, with the OCM, it is possible for some mine operators to use standard diesel equipment underground.

Now 4-cycle diesel bus and truck operators can promote better public relations and good will by eliminating foul-smelling smoky exhausts.

Now both stationary and mobile diesel-powered equipment can run more efficiently in industrial plants.

Requires Little or No Maintenance

The OCM Dieseler is designed to replace any standard diesel muffler. It can be connected to the engine exhaust manifold quickly and easily by your own mechanics. It is strong, compact and rupture proof. Maintenance is practically nil. Tests show that the Dieseler will give you up to 2000-2500 hours of trouble-free service before the catalytic units need renewal. Replacement is simple and low cost.

A Houdry Catalyst

The OCM Dieseler was invented by Eugene Houdry, who developed the catalytic process for cracking petroleum and who is world-renowned in the field of catalytic research. Almost anywhere you use 4-cycle diesel equipment, the OCM Dieseler can bring important benefits to you — in more efficient performance, in increased employee productivity and morale, and often in better public relations as well. Mail the coupon for complete information and technical data now.

OCM CATALYTIC EXHAUST FOR GASOLINE ENGINES

The OCM Catalytic Exhaust does for any engine burning non-leaded gasoline all that the Dieseler does for diesel equipment.

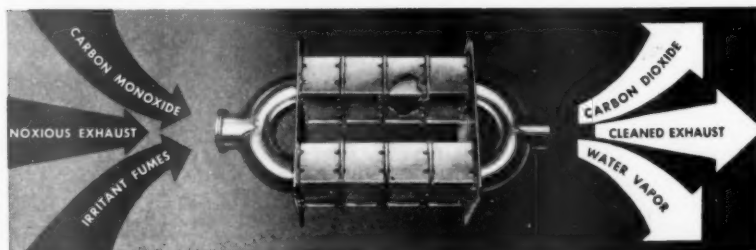
This Catalytic Exhaust eliminates 95% or more of the carbon monoxide — 90% of the hydrocarbons — from any engine in which you use non-leaded gasoline. With the OCM Catalytic Exhaust you can operate lift trucks, tow trucks, loaders, auxiliary generators in even closely confined areas continuously, efficiently and safely. Wherever you use gasoline-powered equipment indoors, you need the OCM Catalytic Exhaust.

OXY-CATALYST, Inc. WAYNE, PA.

MANUFACTURING • ENGINEERING • RESEARCH

Fume elimination processes and equipment for internal combustion engines — for incinerators — for consumer products — and for industrial air pollution control and heat recovery.

NOTE. Dealerships for both OCM Exhausts are now available in most major markets. Write for full details.



OCM Dieseler, Duoflow model. Catalytic units (see cutaway) oxidize irritating, dangerous exhaust fumes and odors to harmless carbon dioxide and water vapor. Uniflow and Quadriflow models also available to equip almost any size engine.

OXY-CATALYST, INC., Wayne, Pa.

Send complete information on ☐ OCM Dieseler; ☐ OCM Catalytic Exhaust for gasoline engines.

☐ I am interested in a dealership

Name _____ Title _____

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provides instant, dependable

***... the widely used, tested and proved
Saunders'* Snake Bite Kit with reliable,
positive-action venom-suction pump***



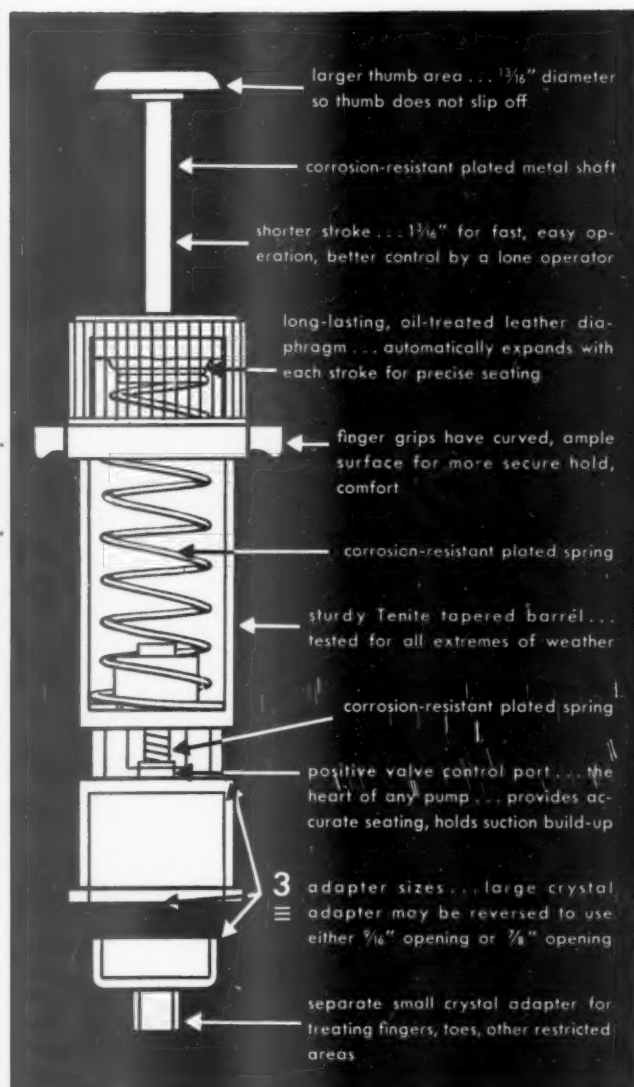
When a poisonous snake strikes, suction must be applied immediately. Venom must be prevented from spreading through the body. You want to be sure it's the right kind of suction ... controlled ... and increased as desired ... easily and quickly administered ... by the victim alone if necessary. This requires a dependable reciprocating suction syringe made with surgical precision. Continuous suction must be maintained up to 15 hours (or until under care of a physician). The average adult rattler, for example, injects about 225 mg. of deadly venom. Authorities state that 25 mg. is a lethal dose to a man weighing approximately 150 pounds. Therefore, life depends on the suction pump, the heart of every snake bite kit! The new improved Saunders'* Snake Bite Kit, the only kit with a performance guarantee, is manufactured and adapted to the Unit System exclusively by MSCO. Ask your distributor, or write for details.



Ask your doctor.

* Patented

first aid when the snake strikes!



Here's why you can depend on this venom-suction pump for reliable performance ... ease and speed of operation.

Practically anywhere in the country, when workers must go into rural and sparsely settled areas, they run the risk of snake bite.

One or more of the thirteen varieties of poisonous snakes native to the U. S. is found in every part of the country. And snake bite usually occurs in isolated areas where medical aid is not readily at hand.

Immediate first aid can be assured only when a snake bite kit is applied on the person. Be sure your men are thus equipped with a dependable MSCO Saunders® Snake Bite Kit—packaged especially for field personnel of the following occupational groups: Utility Men, Oil Field Workers, Construction Crews, Lumbermen, Railway Crews, Highway Workers, Plantation Crews, and others who work outdoors.

GUARANTEE

Your company has provided you with the finest lifesaving equipment that money can buy. The pump in this kit has been made with surgical precision, thoroughly inspected and tested for your protection.

We guarantee to replace this pump free of charge where malfunction is due to workmanship or materials within 5 years from this date. Protect this equipment well; it may save your life. Test and practice with your kit frequently; it may be too late to learn how to use it quickly after you have been attacked by a snake.

MEDICAL SUPPLY CO., Rockford, Ill. _____ date



*Specialists in
unit first aid*

Medical Supply Company

ROCKFORD, ILLINOIS • IN CANADA, IT'S SAFETY SUPPLY CO.



STRONG—STURDY—LIGHTWEIGHT

Daylons

ARE SAFER

The accepted standard for ladders, Dayton's are built of selected, tested kiln dried Sitka Spruce, Douglas Fir, or West Coast Hemlock. Designed in accordance with the latest specifications of the "American Standards Association Safety Code," and to meet Underwriters Laboratories Standards for Ladders.

Approved and Labeled by Underwriters Laboratories.

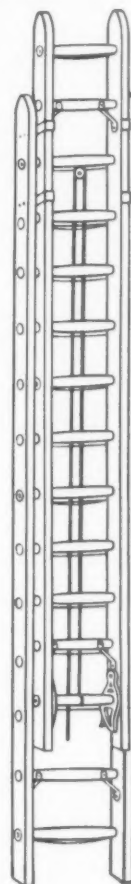


DAYTON Fig. 200 is a well constructed step ladder built for heavy industrial use to stand maximum abuse. Can be supplied with fully radded back for extremely heavy duty jobs. Bucket rack optional. All hardware zinc plated. Sizes 4' to 16'.



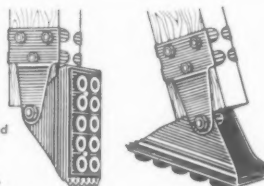
DAYTON Type A is constructed of tested airplane spruce, reinforced with rigid steel supports for great strength, lightness of weight. Handrails of steel guard large roomy platform for added safety. These famous ladders can be set up instantly, are easy to carry and fold compactly for storing. Automatic locking feature insures safety while ladder is in use. Standard rubber safety shoes no extra cost. Sizes 3' to 12' to platform.

DAYTON Fig. 102, a strong ladder for general industrial use. 1-5/16" x 2 3/4" side rails (available 1 3/4" x 3 1/4" side rails if desired—DAYTON Fig. 100). Three truss rods and four dowel braces per section for extra safety. Available with spring locks, rope and pulley if desired. All hardware is zinc plated. Sizes 16' to 40'.



DAYTON Type H, an extremely rugged type ladder, designed and built to meet the demand for a platform ladder with mill wright (rung) type back construction. Tool shelf on top. Ladder shoes standard equipment. Folds absolutely flat for easy storage. Features include pinch-proof type spreaders—corrosion resistant zinc hardware—slip proof treads. Sizes 4' to 16' to platform.

Rubber tread or spiked toe for double use.



DAYTON Safety Ladder Shoes . . . Special suction rubber tread (also in neoprene) really grips. Instantly converted for indoor or outdoor use. Base: 16-gauge steel. Side plates: 13-gauge steel. Renewable treads. Lock nuts, spring washers assure proper adjustment. Zinc plate finish.

Dayton

safety ladder co.

2339 Gilbert Ave., Cincinnati, Ohio

In Canada—SAFETY SUPPLY CO., TORONTO

NEOPRENE CREPE SOLES

add skid resistance and extra durability to
Thorogood "job-fitted" work shoes
by *Weinbrenner*



Courtesy:
Albert H. Weinbrenner Co.,
Milwaukee, Wisc.

Sure-footed as a cat and a bear for wear—that's the great new Thorogood "job-fitted" BRUISER. Designed primarily for roofing and other dangerous work, this shoe is well suited for any job where the going's really rough. From double-thick cowhide uppers to rugged sole of neoprene crepe it's constructed in every detail for long-lasting foot protection.

There's a big durability story built right into that neoprene crepe sole. It won't soften or spread on the hottest roof . . . won't chip or crack on the sharpest rocks. Another important feature is its resistance to grease, oil and "hot stuff." Yet for all its ruggedness a neoprene crepe sole provides foot-cushioning comfort that makes any job less tiring.

It's easy to see why workmen go for soles of neoprene . . . and why more and more manufacturers are specifying neoprene soles for their top-quality safety shoes.



For the toughest jobs



For the roughest surfaces

DU PONT
NEOPRENE CREPE



BETTER THINGS FOR BETTER LIVING

. . . THROUGH CHEMISTRY

SEND FOR FREE BOOKLET

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Rubber Chemicals Div. NS-5
Wilmington 98, Delaware



Please send me your illustrated booklet "Neoprene Crepe Soles," containing full information on neoprene's unusual properties . . . data on comparative tests . . . detailed description of its superior qualities.

Name _____ Position _____

Firm _____

Address _____

City _____ State _____

FASTER
MORE EFFECTIVE...
MORE DEPENDABLE
FIRE-STOPPING
POWER

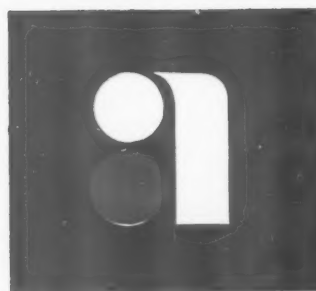


MODEL 20-B



ANSUL
Chemical Company

FIRE EQUIPMENT DIVISION • MARINETTE, WISCONSIN



ANSUL

FIRE EXTINGUISHING EQUIPMENT

FASTER . . . A short, quick downward motion of the puncture lever pressurizes the extinguisher and it is ready for instant use.

MORE EFFECTIVE . . . Even the inexperienced operator gets near-expert results because of the ease of operation and handling. In addition ANSUL "PLUS-FIFTY" Dry Chemical has greater fire-killing power.

MORE DEPENDABLE . . . Exclusive ANSUL-ENGINEERED design features include water-tight and corrosion-resistant construction, easy, on-the-spot recharge without special tools and other exclusive Ansul developments which insure greater dependability.

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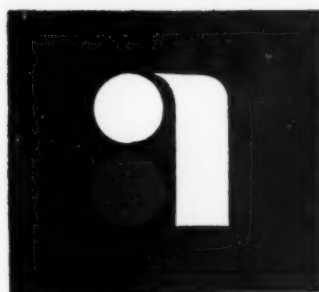


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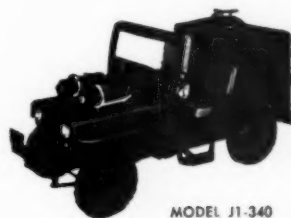
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National Safety News, May, 1954



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WHY SETTLE FOR LESS? . . .

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MAY, 1954

For Those in Peril

Prayers for the safety of travelers have been included in the liturgies of many churches and the same theme has inspired several hymns. Best known of these is the one adopted by the United States Navy: "Eternal Father, strong to save, whose arm doth bind the restless wave . . ."

But thanks to developments in marine engineering, meteorology and radio, an ocean voyage has become a safe and pleasant experience. Even seasickness has lost much of its terror. Man-made agencies, such as submarines, mines and aerial bombs have gone far beyond wind and wave in destructiveness.

Rail travel, although not free from spectacular disasters in the past, has never appealed to the imagination to the same degree as the sea and it is seldom mentioned specifically in petitions for divine protection.

Safer rail travel has been one of the accomplishments of the last half century. It has been brought about by growing safety mindedness from top management all the way down the line. With all forms of transportation, the traveler is protected because men he never sees are doing their work faithfully.

The hymnal of the United Church of Canada, a rich treasury of sacred song, includes a hymn for air travelers. But air travel in the fifty years of its existence has ceased to be a death-defying adventure. Every major city of the world has its airport, with planes leaving daily for points near and far. Perhaps the best indication of the increasing safety of air travel is the fact that life insurance companies no longer demand extra premiums from passengers on scheduled flights and vending machines at airports issue 25 cent accident policies.

In our own time the scene of greatest hazard has shifted to the highways. For years industries have been finding that the number of employees injured and killed off duty has greatly exceeded casualties on the job. To conscientious management this is a reminder of a problem to be faced in cooperation with local and national agencies rather than a source of satisfaction over the rela-

tive safety of working conditions in industry.

To say that this phase of the accident problem surpasses all others in complexity is to state a very obvious conclusion. It cannot be solved by police work alone. Safety in an age of power and speed calls for extreme self-discipline and re-appraisal of individual rights and privileges.

Light's Diamond Jubilee

If an industrialist accustomed to 1954 plant conditions found himself back in a typical factory of 75 years ago he would probably be amazed at how people ever worked under such poor light—spots of glare against a background of gloom.

But if the light levels in a nineteenth century plant had been stepped up to modern standards, the result would have been distressing to self-respecting management. Dirt, disorder and hazard would have been too conspicuous to overlook.

Light—electric light from modern sources—deserves much of the credit for improved plant conditions.

For centuries man's activities slowed down at sunset. The feeble light from torches, oil lamps and candles was inadequate for many seeing tasks. But there was much less precision work than modern living demands.

Gas light was an important step. The electric arc lamp also brought higher light levels. But neither source had the efficiency or the convenience of modern installations.

Then in 1879 Thomas A. Edison brought out the first practical incandescent lamp. Some 20 years before, Sir Joseph Swan had demonstrated the principle of this type of lamp but Edison's model was the first to really work.

The first incandescent lamp was not an immediate competitor of existing light sources. But Edison and his contemporaries and successors kept on adding the improvements that have dispelled darkness. No less important than the lamp itself was Edison's work in the development of better means of generating and distributing electric current.

We've Learned from Our Failures

By HARRY H. HILLMAN

Experience—bitter as well as pleasant—has emphasized certain conclusions about management's role in accident prevention

THESE conferences represent, in my opinion, the start of a program which can be the greatest contribution to the industry the association has ever had.

The association recognizes that employee training and upgrading is not a competitive area among oil companies but is as appropriate for mutual study and work as statistics, legislation and taxes. The program will complement, and complete, the training and education activities of the oil companies, service companies and contractors.

If each of us takes back to the job a couple of new ideas or methods, the industry will profit greatly. The number of individuals benefitted directly will be multiplied many times as the information is passed on to others in your company. Over a cup of coffee or at the supply store, the information is picked up by other companies and the good word spreads.

I feel qualified to talk about management's responsibility in safety work less by the modest successes of my own organization than by the many failures which we, and many others, have had. An analysis of these failures has provided me with certain conclusions.

I have always been interested in safety because I believe it to be the very cornerstone of the factory in which we have efficiency, economy, high morale, and a top quality product. Many times you

have heard men speak of management's responsibility and interest in safety. The talks I have heard have dealt at length with the cost in dollars and in human suffering. Enough has been said of this.

Now I would like to attempt to answer this question: "Who are the members of management, what are their exact responsibilities,

and how can they carry out those responsibilities?"

Let's further analyze and define management's responsibility, and see what it means in the broad sense. Safety, according to Webster, means freedom from danger or hazard, keeping of oneself or others safe from danger or accident, and the quality of giving confidence, justifying trust, dependableness.

According to the same authority, management is comprised of those who control, direct, order, lead, manage and instruct. Responsibility means accountability, answerability, reliability and trustworthiness. Having always been a person who would never use one word when I could get away with ten, let me state the subject of this paper in a full sentence. Everybody in a company who directs, controls or orders others is responsible and accountable for providing, for the benefit of himself and those he is directing, freedom from danger or hazard, and keeping himself safe and others safe from danger of accident.

Or, it might be said thus: all those who direct others are accountable to their superiors and responsible to those whom they direct, for the prevention of accidents. Management, then in my book, embraces all individuals who direct others — presidents, vice presidents, superintendents, fore-



HARRY H. HILLMAN is President, California Production Service, Inc., Chairman, Safety Committee, American Association of Oilwell Drilling Contractors. This article has been condensed from an address presented at the Oil Industry Regional Safety Conference, San Joaquin Valley Area, Sponsored by Western Oil and Gas Association, at Bakersfield, California, September 29-30, 1953.

men, drillers, head well pullers and head roustabouts.

Responsibility of these members is twofold: First, to provide safe equipment, safety equipment and materials, rules and regulations, and the services of a safety director; second, to provide leadership. A good safety program and a good safety record are unattainable without both.

Far too many members of management, at all levels, think the only thing necessary to attain a good safety record is to hire a safety director and buy safety equipment. Personally, I know of a number of companies where top management felt that this was all that was necessary. I've heard some of them personally express their complete lack of comprehension as to why, instead of getting better, their accident record got worse.

These tangibles, which can be bought with money, are important and necessary, but they won't get the job done without leadership.

What, then, are the functions of the safety director? His is the responsibility of developing a program, ideas and procedures to be put into effect by line management. At the request of line management, he helps them sell safety; where line management isn't an enthusiastic believer in safety programs, he tries to sell safety to them.

A Many-Sided Job

In the main, the safety director is a salesman of safety and ideas. His job also should be to study and analyze the accidents and the accident potentialities, the equipment, the methods, the procedures, to ferret out the reasons for past accidents and possible future ones so that these reasons can be eliminated or avoided. The area for analysis is ever widening and even getting into the area of psychology. Jodie George of The California Company at a Barge and Off-Shore Safety Clinic held in New Orleans analyzed personality traits for accident potential. In addition

to bad personal habits and bad health, he strongly recommended that accident analysis also consider inattention, slow thinking, slow reactions, impulsiveness, recklessness, worrisomeness, and uncooperativeness. Equipment and safety directors management can buy, but dollars alone will never be able to produce a good safe operation.

To these things which we can buy, we must add leadership that

The top leader is the man who devotes his efforts, and talents, automatically and unconsciously, to finding out *what* is right—not *who* is right. What are the ingredients that go to make a top leader? Not in the order of their importance, because all are important, but I believe the main ingredients are these:

1. *Knowledge and Intelligence.* A leader must have technical mas-

INGREDIENTS OF LEADERSHIP

1. Knowledge and intelligence
2. Judgment and decision
3. Initiative and enthusiasm
4. Goals and accomplishments
5. Responsibility, reliability and accountability
6. Cooperation and friendliness
7. Calmness and patience
8. Faith, loyalty and humility
9. Integrity

will get the job done right. Recent University of Michigan studies show that the average U. S. worker works at only 41 per cent of his capacity. This, to me is a censure of management rather than of labor, because I know that labor will produce more than that with good leadership.

Leaders are divided into two types. First, there is the type that dominates those that are led, who leads actually from behind—driving, cursing, threatening, demanding. Second, there is the leader who enriches the lives of those who are led, works for their, and his, improvement—out in front, where a leader should be, where he can be seen and, by his example, accomplish his ends.

There is a third group of people in management, probably far too many, who go blithely along doing what they think is their job but without providing leadership of either kind. These men are not leaders in any sense of the word. They have not accepted responsibility and avoid it like the plague.

tory of his job and the intelligence to apply that know-how. He knows the rules, regulations and policies, and he intelligently enforces them.

2. *Judgment and Decision.* A leader must have the judgment to recognize his own bias and preconceived opinions; he must weigh the evidence, analyze alternatives and then make his decision on the basis of the means most likely to bring about the desired result. He must have the capacity for making right decisions most of the time, and he makes those decisions promptly but only after careful judgment has been exercised. The man without judgment and decision is a threat to subordinates and superiors alike.

3. *Initiative and Enthusiasm.* A leader desires to improve himself and the man he leads. He is not satisfied with "status quo" for he knows everything can stand improvement. He is constantly looking for new methods, experiment-

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Several reliable devices for measuring visual skills are on the market. The 12 skills can be measured accurately in 6 to 8 minutes. The device shown is the Bausch & Lomb Ortho-Rater.

This Is the Age of Seeing

By R. A. SHERMAN

**Adequate illumination and good vision are both necessary
for the exacting seeing tasks imposed by modern industry**

THE RELATIONSHIP between visual performance of employees and their productiveness and freedom from accidents has been demonstrated repeatedly. We believe this procedure can be helpful in stimulating effective approaches to many production and personnel problems.

Generalization about the desirability of light and sight seldom ring the bell. We all agree that light is essential to sight and that sight is essential to productiveness and safety. Light in some form is provided in all plants, while some form of vision test is probably the most common pre-employment requirement.

The error in our thinking comes from our smugness in assuming

that we have done our duty to management, stockholders, employees and ourselves when we have shown that each employee has light on his job and that he could see when hired. The inadequacy of these two essential ingredients—light and seeing—too often is passed over casually.

According to the laws of probability, one out of four of us can improve his well being, productiveness and freedom from accidents by doing something to enhance his visual performance.

We cannot measure visual skills by guessing and observing. We must test them to evaluate them. We cannot appraise them by observing them any more than we can look at an automobile engine and tell how efficient it is. They must be put through the paces or on the testing block to be evaluated.

How we see has effected the lives of each of us. Knowingly or unknowingly it has influenced our

learning and the choice and course of our activities.

No two persons see alike, just as no two think alike, talk alike, or walk alike. Seeing is something we do. It is a physical and mental act even though we may be unaware of our doing it. Some of us see skillfully, some clumsily, and haltingly. Some of the most expressive and beautiful eyes can be the most inefficient for certain jobs.

Seeing is not a unitary matter. It is a complex act combining several skills. The ability of each eye to perceive small details at a distance (20-20, 20-40 or some other Snellen fraction) is one very important item but it is only one of the many that go into seeing performance.

Two-eyed seeing is a complex process. Not only must each eye turn and focus instantly and precisely but both eyes, operating as a team, should coordinate so that each one points toward and fo-

R. A. SHERMAN is Director, Occupational Vision, Bausch & Lomb Optical Company, Rochester, N. Y. This article has been condensed from a paper presented at the Symposium on Lighting and Seeing, 41st National Safety Congress.



Figure 1. Fifty-one women working at hosiery seaming were given visual performance tests. Scores were compared statistically to production data.

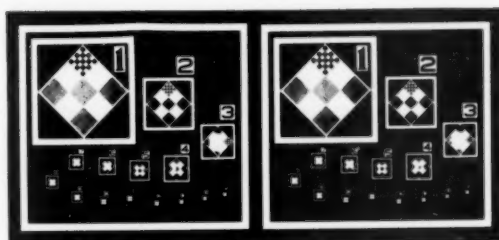


Figure 2. One of the 12 test slides.

Expectancy Chart

Test Scores	Chances in a hundred of attaining standard of job success	
10-11	100	
8-9	77	
4-7	17	
0-3	15	

- Job title: *Hosiery Seamers*
- Department: _____
- Works or plant: _____
- Measure of job success: ☒ Production data; ☐ Personnel data; ☐ Judgment; ☐ Work sample
- Standard of job success: *Seam 132 doz pair or more (per 40 hr. week)*
- Test: *Ortho-Rater Near Point Acuity Test (worse eye)*
- Employee sample: N = *51*; Present employee ☒ Follow up ☐
Those eliminated, if any: *None*
Other data on sample: _____
Mean test score: _____ variability: _____
- Probabilities of differences due to chance:
The relationship between test scores and the job success measure is such that it could have occurred this chance alone about *1* in *1000* times.
- Date of study: *9-48*
- Other data: _____

Figure 3. Results of statistical analyses are shown in the Lawshe Expectancy Chart. Those with high scores on the acuity tests had the best chances of attaining the job success standard—seaming 132 dozen pair or more per 40-hour week.

cuses on the object of regard with effortless, instantaneous precision. It is in two-eyed seeing that most visual discomfort arises. Two good eyes not performing as they should often bring tenseness, discomfort and general visual inefficiency. Improvement of lighting often brings latent binocular inefficiencies to the surface, and causes an individual to experience discomfort for which he wrongly blames the illumination.

Let us cover briefly some of the effects that our seeing has on our occupations. In this way, we hope we can add emphasis to both lighting and seeing. For example, Mr. Paul Hildebrand of the Pennsylvania Power and Light Company in his attempt to bring light and sight together toward a coordi-

nated activity, coined a most appropriate name—"Industrial Seeing—A New Concept in Industrial Lighting." It implies the scientific application of vision and lighting to our occupations.

We have made positive statements about the relationship between our seeing habits and our performance on occupations and general well being. Also we have made positive statements about one out of every four of us needing, for his own general well-being, attention to his own vision. We make these statements with confidence because of an abundance of factual evidence.

During the past 14 years intensive and continuing research has been under way at Purdue University and other Research Cen-

ters. It has covered questions such as:

1. Is our vision related, (a) to our productiveness, (b) to our freedom from accidents, and (c) to our general well being?
2. Which factors of vision are most important to our occupations?
3. Is there a scientific and economically sound method of measuring those factors of visual performance which are important?
4. What standards should be used to insure benefits to all parties concerned?
5. What percentage of those whose vision is below the desirable level can be rehabilitated and brought up to standards by conventional referral to eye men?
6. What benefits to management, owners, employees and the public can be expected from improvements in visual performance?
7. What does it cost?

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Back of the program of the Lehigh Valley Safety Council are the important industries of the area. Above is a night view of Bethlehem Steel Company's Bethlehem plant.

Pioneer Local Council

By HAROLD A. SEWARD

Founded just a few weeks after the National Safety Council, the Lehigh Valley Council is now in its 41st year of community service

IN 1911 there were few people who thought of safety as a movement. Yet, in that year, Bethlehem Steel Company began to set up plans for a safety program in all of its plants at the special request of three of the top industrial men of the nation: Charles M. Schwab, E. G. Grace, and Archibald Johnson.

Naturally, the first steps in this direction were taken at the home

HAROLD A. SEWARD is Secretary-Treasurer, Lehigh Valley Safety Council, Bethlehem, Pa.

plant in Bethlehem, Pa. A trial program was inaugurated for the remainder of that year and a future one set up for the next. In 1912 George T. Fonda was made director of the safety program at Bethlehem. In 1913 he was named safety engineer of the plant and was sent to New York as the company representative to the National Safety Congress.

After the Congress a safety meeting was held at the plant at which all department heads were in attendance. This meeting was held

in the general offices of the Bethlehem Steel Company and W. F. Roberts, general superintendent of the plant, presided. Mr. Roberts explained that a National Council for Industrial Safety had recently been organized at the Safety Congress held in New York in September and that active work on a national program had begun. At this meeting, October 23, 1913, George Fonda gave a brief outline of the events leading up to the formation of this National Council. He also explained how local

councils could be formed to cooperate with the National Council and suggested the formation of a local council to serve the interests of safety in the Lehigh Valley area. It was decided unanimously to form a permanent council.

Men were selected to contact other men in other industrial firms in the area that might like to join in the movement. A second meeting was arranged for early December. In the meantime a committee on organization was to go to work setting up a slate of officers, Constitution and By-Laws, and other details.

George T. Fonda, Bethlehem Steel Company, secretary-treasurer.

On March 20, 1914, the Lehigh Valley Safety Council had the first meeting at which it invited the public to attend. This was its first effort at what might be termed today a "Conference." At that meeting, W. H. Cameron, secretary-treasurer of the National Safety Council, was the main speaker. The meeting was held in Easton, Pa., with two thousand in attendance. Mr. Cameron's talk was illustrated with colored slides and was entitled "Enthusiasm in Safety Work." After the meeting

membership swelled to 40 industrial firms.

The next year the Lehigh Valley Safety Council applied to the National Safety Council for recognition as a chapter. The National Council chartered the local as Chapter No. 5 in 1915. Since that time the four local councils that were recognized previously to the admission of the Lehigh Valley council have gone out of existence, making the Lehigh Valley Safety Council the oldest existing local safety unit. This year of 1954 marks the forty-first year of the council's continuous service in the field of safety.

In 1916 the local council organized Sections as follows: Cement, Mining, Industrial Surgeons, Iron and Steel, and Public Safety. By this time the membership had grown to 58 industrial firms and the first movements were being made in the direction of expanding the field to take in more than industrial safety. The newly created Public Safety Section began to set up programs in off-the-job accident prevention.

In 1917 the Mosser School in Allentown was chosen as one of the ten public schools in the United States selected as demonstration centers for the teaching of school safety. Naturally the local council

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ON THE JOB



AND OFF DUTY



Protection around the clock for all citizens is the goal of a local safety council.

On December 5, 1913, the Lehigh Valley Safety Council came into being. The name and the Constitution were adopted and seventeen member firms were admitted to the Council. The officers elected were: W. F. Roberts of Bethlehem Steel Company, president; F. P. Sinn, New Jersey Zinc Company, 1st vice-president; W. R. Dunn, Vulcanite Portland Cement Company, 2nd vice-president;





For work around live electrical equipment this 10 KV fiberglass hat meets requirements. (E. D. Bullard Co.)

THE 200th member of the Turtle Club received his Certificate of Membership during the 41st National Safety Congress. Like the other 199 members before him, his life had been saved because he was wearing a safety hard hat.

The 200th member was Michael Sikurenic, an employee of Bethlehem Steel in Johnstown, Pennsylvania. He had been struck by a 60-pound piece of cinder which had fallen from a platform six feet above him. He was not injured, and lost no time from his work.

The roster of the Turtle Club proves conclusively that hard hats and caps are saving lives, cutting wasted man-hours, and saving thousands of dollars each year.

The National Safety Council reports that in 1952 there were 120,000 head injuries, exclusive of eye injuries. This amounts to 6 per cent of the total disabling injuries in all types of industry in the United States.

Protective hats are needed on all jobs wherever heads are menaced by falling objects. Today hard hats are widely used in all types of industry, especially in construction, shipbuilding, petroleum, mining and lumbering.

The first head protection probably was used by armor-clad knights centuries ago to ward off an adversary's mace or battle-axe.

This article was prepared by the Industrial Safety Equipment Association.

Head Protection in the 20th Century

Thirty-five years ago hard hats were introduced in mines.

Now, improved models protect heads in many industries

These cumbersome and unwieldy helmets were crude, but with little variation they constituted the only safety head protection in the world until the early part of the twentieth century.

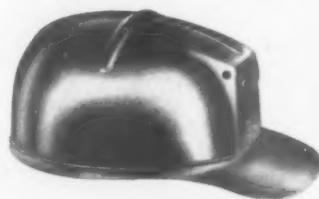
In 1919 the first head protection in the United States was manufactured in San Francisco. Developed primarily for miners, it soon became evident with the growth of industry throughout the country,

ered with a skin of waterproof cloth that was usually treated with asphalt to make them both sturdy and waterproof.

With the tremendous growth of industry and the sharp increase in accidents, it became necessary for a standard code to be set up covering head protection as it covered all other safety equipment. It was decided that hard hats must be water, acid and fire resistant. They must be light in weight and have exceptional resistance to impact and piercing. They must be non-conductors of electricity and heat.

All of these features were found in the first hard hats. However, the manufacturers constantly worked to improve their product and to give workers the greatest amount of protection with a corresponding amount of comfort.

The most extensively used materials today are Fibreglass, impregnated with polyester resin, cloth laminated plastic molded under pressure, injection molded plastic and aluminum. All of these materials produce hats that pass the standard tests. Aluminum hats and caps meet all requirements except dielectric strength, and



Miner's cap with bracket for lamp. (Mine Safety Appliances Co.)

that there was a need for head protection in almost every field.

The first hard hat was efficient, but rather uncomfortable. It consisted of a fiber frame formed into a crown, with an added brim, cov-



The original hard hat developed for mine use. It was efficient but not too comfortable. Other industries adopted head protection. (Bullard)

should not be worn where there is danger of electrical contact.

Fibreglass, because it has a strength-to-weight ratio in excess of steel, needs no reinforcement, and when extra ingredients are added it has an extremely high dielectric strength. Present standards require that a hard hat or cap be able to withstand 10,000 volts before it can be accepted for use by men who come in contact with high power lines.

Originally, hard hats fitted snugly around the head. Cushions or air spaces were provided to reduce the shock of the blow. However, as improvements in the outer shell were made, also improvements in the inside were developed, which resulted in a cradle-type headband which is easily and cheaply replaced.

Leading manufacturers of head protection today have developed a headband assembly which, when adjusted, fits heads of all sizes. This aids in reducing the inventory that must be carried by a company, and also makes it simple for the assembly to be adjusted.

For cold weather, winterliners may be attached to all hard hats. This lining is usually made of water-resistant cloth to protect the head, neck and ears, and is available in flannel or wool lining, with or without earlaps, depending on the climate where it will be used.

Chinstraps have also been found useful and are available to fit all

types of hard hats and caps. These are primarily used by utilities, on bridges and oil derricks and other areas where high winds are encountered.

Attachable to all hard hats are eyeshields of transparent plastic material, which further aid in the protection of the eyes and face.

With the introduction of Fibre-



Plastic hard hat. (Willson Products, Inc.)



Cap with bracket for miners lamp. (Davis Emergency Equipment Co.)

glass, permanent colors became available. There are eight standard colors today: White, green, red, grey, orange, brown, blue and black. A total of 17 different colors and shades are available on special order. This type of colored hard hat will not fade or deteriorate, as it is permanent. The process includes adding the color to the Fibreglass and resin before the final mold is made. Phosphorescent pigment may also be added which will make the hat glow in the dark for as long as eight hours. Only a five-minute exposure to daylight is needed to revitalize it for another eight hours.

A frequent policy of many organizations today is to set up a color code to designate the wearer's department or trade. Many different codes have been established, but



Aluminum hats combine efficient protection with light weight. They should not be worn around electrical equipment. This type is also available in full-brim style. (Bullard)

one which is especially efficient is in operation at the Higgins Shipyard in New Orleans. Their color code is as follows:

Pipe Departments	Red
Shipfitters	Blue
Welding	Green
Rigging	Buff
Electrical	Yellow
Labor	Black
Burning	Grey
Carpenters	Brown
Painters	Brown Bottom, White Top
Machinists	Red Bottom, Blue Top
Shear and Blacksmith Shop	Grey Bottom, White Top
Sheet Metal	Green Bottom, White Top
Expeditors	Lavender
General Foremen	Aluminum
Caulkers and Sanders	Brown Bottom, Yellow Top

A black line on a hard hat denotes a foreman, and a red line on a hat or cap denotes a leadman.

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Full-brim fiberglass hat. (Davis-Emergency Equipment Co.)



Brimless hat, also available in full-brim and cap styles. (U. S. Safety Service)



Together they keep the plant clean

AT HOME, the housewife with a reputation for neatness is the one who has the family trained to keep things picked up. A well-managed industrial plant operates on the same principle.

At the Studebaker Corporation, South Bend, Indiana, keeping the plant a clean and attractive place to work is not a job for one person or group of persons. The General Housekeeping and Sanitation Division, under Supt. Ted Neher, has plenty of helpers throughout the plant.

Working around the clock, some 426 people mop miles of floor, wash thousands of windows, paint, dust, sweep, and perform many other duties daily.

For many years, each department at Studebaker was respon-

sible for its own cleanup, but in 1950 the Housekeeping and Sanitation Division was created to bring uniformity in cleanup procedures and help improve working conditions.

Under the present system, such people as spray-booth cleaners, janitors, sweepers, yard cleanup men, window washers, and painters are included in the same department. The job of coordinating these activities is an enormous one but Supt. Neher and his men have made conspicuous progress in making Studebaker a better and cleaner place to work. They are constantly on the alert for new techniques, and as will be noted in the accompanying illustrations, their work is aided by mechanical equipment.

Mechanical equipment multiplies the effectiveness of each member of Studebaker's Housekeeping and Sanitation Division. This vacuum sweeper does a fast, efficient job of picking up dirt and dust. Photos courtesy *The Studebaker Spotlight*.

The exterminator plays an important part in maintaining sanitary conditions.

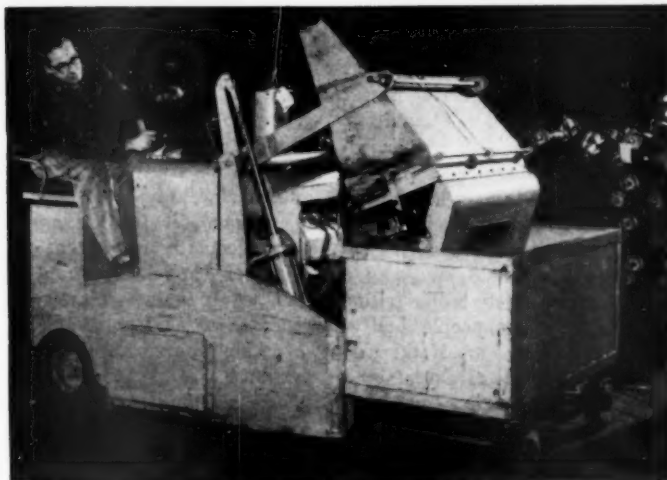




Striping machine marks off the aisles. Another member of the housekeeping staff is painting a "no smoking" sign on the floor at the right, background.



Housekeeping and sanitation supervisors, left to right: S. P. Kulcsar; John Aronowski, P. F. Hope; E. T. Atkins, assistant foreman; Ted Neher, superintendent; W. E. Kolar; A. M. Chase; Franklin Rosenbaum; P. A. Jewell and C. D. Davis, assistant foreman.



The floor scraper is an efficient machine for removing oil from floors.

Painting, inside and out, is carried on winter and summer by company crews.

This floor scrubbing machine is one of the hardest workers in the department. Supplementing its scrubbing action is the suction water pickup.



Lets' have

More Sales Effort At the Job Level

By JOHN M. ROCHE

Certainly, safety starts at the top. But selling management is only a small part of the total sales job

WHETHER HE realizes it or not, the successful safety engineer is a good salesman. No matter how profound his knowledge of the basic sciences, no matter how clear a thinker he may be, he will not be a successful safety engineer until the ideas he expounds are bought.

And selling safety is like selling lighthouses. Few people believe they need safety, or, if they do believe it, they are afraid to admit it because it might be considered evidence of weakness.

The safety engineer must be able to sell his product up and down the line in industry—to top management, to supervisors and foremen, and to the man on the job.

For years we have been stressing the thought that safety must start at the top. Certainly, I agree with that. But I deplore the fact that so many insist that the only place to sell it is at the top level. Many of us have believed for a long time that if we sell top management, our selling job is finished, and that henceforth everything will be safe—automatically.

What could be further from the truth?

It's absolutely true that in the beginning safety must be sold at

the top to create a favorable market in the rest of the organization. If top management wants safety and demonstrates an active interest, then the safety program has a good chance of success. On the other hand, if top management only reluctantly agrees that safety is desirable and does nothing more than to agree that a safety program should be put into effect, then the program is foredoomed to failure.

Foremen and supervisors, and particularly workmen, are quick to discover a tongue-in-cheek attitude on the part of management. They may be fooled, but not for long. Again, let me say that selling at the top is only a small part of the total selling job.

The Busy Supervisor

You may remember that from about 1932 on through the end of the last war, we stressed supervisory responsibility for safety. The truth of that idea is no less evident today than it was when it was conceived by Bill Heinrich in the early 30's. The supervisor is the key man in any safety program, just as he is in the production scheme. He is the liaison between management and labor and the liaison activities work both ways. He is the man who brings the orders to the front office, sees that they emerge from the paper-stage to the physical things created in the plant. He is the man who

breathes life into the safety program, who sees that the words, the suggestions, the orders and the recommendations that have been made are carried out not only by himself, but by those working under his direction.

But the foreman has a multiplicity of responsibilities and duties and in many cases he must carry out these responsibilities without complete enforcement authority having been delegated to him by top management. He is responsible for production, sometimes for training men, for keeping time, for maintaining stock control, for keeping scrap and spoiled work losses to a minimum, for taking up collections for the Community Fund, and for making certain that his men follow all the thousand-and-one rules and regulations that exist in most plants. Then, on top of that, we make him responsible for the safety of those working under his direction.

Most supervisors don't complain. They do their jobs and do them well. They are the kind of people who make America what it is today, the men and women who accept just a little bit more responsibility than is their just due because they are the type who want to see that things go right.

They are well worth what they are paid and in most cases, worth much more. Without the wholehearted backing of foremen and supervisors, the industrial safety

JOHN M. ROCHE is Chief, Safety Division, Chemical Corps Material Command, Baltimore, Md. He was formerly Manager of the Industrial Department, National Safety Council.

program in this country would never have reached the high level at which it stands today.

One of the fields that the safety engineering group as a whole seems to have neglected somewhat is that of selling safety at the job level. Most of us deluded ourselves with the belief that we were doing an excellent job of selling safety at the worker level. Did we not have posters, films, safety-graphs, lectures, bulletin-boards, safety instruction cards, contests and many other things which we believed to be selling safety to the man at the job level?

Fooling Ourselves

Yet, if we make a real analysis of the things which we have been using to sell safety to the man on the job, we can't help but realize that we have been fooling ourselves by presenting things to the man on the job which we as safety directors like—not what the men like.

Several years ago I made a survey with a group of engineers and psychologists to determine just what workers on the job thought of the safety posters we were putting before them each month. These posters, mind you, were the result of not one individual brain-child, but of a group of persons who studied them very carefully and then passed on their excellence as to art work, the idea, the safety message, the color, the composition, and what-have-you. Generally, we were all pleased when, after many changes, we produced what we thought was a fairly good safety poster.

Much to our surprise, the very posters which we "experts" thought were best were critically and sometimes contemptuously received by the men on the job.

They were not impressed with the fact that the employer lost money when an injury occurred to a worker. The word "rule" or "instruction" immediately aroused resentment, no matter how cunningly it was sugar-coated with art work or cartoons. Colors seemed to mean little or nothing, and

New Refinery Safety Record



As of 7:00 a.m., February 10, 1954, the Baton Rouge Refinery of Esso Standard Oil Company established a new man-hour safety record for oil refineries. The 6,900,000 man-hours established at that time exceeded the old record of 6,379,296 man-hours held by the Wood River, Ill., Refinery of Standard Oil Company (Indiana) since 1942. This new record was established by 7,644 employees working 162 days without a disabling injury. This record is continuing. On February 24, they had completed 176 days and 7,500,000 man-hours without a disabling injury.

some of the so-called heart-throb posters made the committee members feel as though they were dealing in very sour corn.

What kind of posters did they like? Funny posters? Yes. Serious posters? Yes, they like those too, but the kind that seemed to evoke the greatest interest were straight, instructional type posters that said "do this," "do that," and which explained why the rule or instruction was needed.

We found that employees did not resent rules and instructions per se; rather they resented the method by which the rules and instructions were given.

I don't know that the work of that particular study committee made much difference in the production of posters in this country, but it did, however, impress me and I have since tried to design

posters for the group, to be influenced by them rather than have them conform to my personal likes and dislikes.

The same thing holds true for films, safetygraphs, instruction cards and any of the propaganda-type media which we use to influence the worker. In every instance, we must keep firmly in mind the audience that is to receive the work and make certain that we have plenty of criticism in the preparatory stages. All of this doesn't mean that we ought to go out of the poster business or stop using other educational media.

On the contrary, we should produce more and more material intended to influence the employee, but it should be aimed directly at the heart of the problem, that is,

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Imitation of Wisdom

(Fiction)

By BILL ANDREWS

Tuesday, May 4, 1954.

THERE ARE GUSTS of rain splattering my office window. The wind is just a little south of west, and there is a good wet smell softening its coldness.

This is not one of the sleepy spring days—but it is a day full of life and growth and looking forward. It is a day to wonder whether the fish are jumping on Lake Agnes and whether the snow plows have opened my favorite pass in the Rockies. It is a day when it seems right to start mapping out the departmental vacation schedule and to thumb thru my file of resort folders.

These are the things it seems right to do. What I am actually doing is trying to figure out how

it will be possible to distribute our available man power over the next eight weeks to get out of the way the things that must be gotten out of the way before I can take a vacation with a clear conscience.

Item: Galeston wants help in setting up a special series of safety meetings designed to make the effect of their spring clean-up campaign carry over into a permanently changed attitude toward plant housekeeping. In the last six weeks we have had two lost time accidents there directly chargeable to bad housekeeping—a sprained ankle caused by a mislaid pop bottle, and a crushed foot caused by a fall of badly stacked material. In addition, the plant had a small fire in the warehouse which origi-

nated in a trash accumulation.

Item: I want Harry Dexter to spend three days at least in our logging operation in Wisconsin, both to hold some meetings and to familiarize himself with the problems of that operation.

Item: In the third week of May, we are holding a school for new safety committeemen.

Item: I have just hired a new junior safety engineer, and I want to spend a great deal of time orienting him to the job.

Add to these all of the normal chores—the inspections, the committee meetings, the report and bulletin writing, the correspondence, and my own efforts to wangle some new equipment out of the front office, and I can see ten weeks' work to be done in the next eight.

I wonder why it is so much easier to see the jobs that have to be done than to decide what jobs can be left undone. This is the time of year for Harry to get the most good out of a trip to Wisconsin. This is the time when there is a real opportunity to move forward in Galeston. My new safety engineer will never be green again, so this is the time to incline the twig. If I slack off on the routine chores, I know that I am gambling with the lives and welfare of the people who work here.

So my mind turns back as it usually does in times of tough problems to the way my first boss used to meet his problems at Monarch. I try to remember how he made his decisions to cut the amount of time expended on useful projects.

And as I think back, I remember this incident . . .

. . . That was a May day, too. I was 24, and I had been with Monarch for six months—just long enough to be enjoying the feeling that I had learned all there was to learn about safety, and not long enough to know how little I knew about it.

I came in from the shop floor with a clip board loaded with sheets detailing the observations of a full afternoon spent on a series

of departmental inspections. Full of the importance of my findings, I sat at my desk and started to hammer out a report. I got about half a page typed when I heard a most familiar bellow.

"Just what the blazes are you working on?" the boss said. I told him.

"Why are you doing that?" the boss asked.

"I wanted to get the material down on paper right away, and I didn't have anything more important to do, so I thought this is what you'd want me to do."

The boss then unloaded himself of a sermon I've never forgotten. It went something like this:

"I sent you out on a routine inspection. You come back with enough notes written on paper to stuff a cow. I am sitting right here as you come in and you don't even stop to tell me what you've found out. What's the idea?"

I replied right out of the business administration textbooks that I thought he would rather have the information in written form than orally. A look of profound pain grew on his face as I talked and he continued with his sermon:

"Look, youngster! Learn one thing they don't teach you in Tech. Sure, I want those reports in writing and in full. I want 'em so that I can impress some foreman with how much I know about the situation in his department. I want them so that I can show the front office that we've got our finger on the pulse of the plant. I want them so that if some nosey so-and-so starts asking what we do for a living here in the safety department, I can show them what we do. And do you know what all those reasons add up to? They add up to window-dressing! They add up to advertising and kidding the world into thinking that we're smarter than we are.

"But I don't send you around the plant just for that advertising job. If you've come back with all that material, and if you're any good, there are at least three things you've learned that are important enough so that you should

have told me about them the minute you came in the door. The rest of the stuff could have waited or could have been forgotten entirely, but those three things I had to know about right now if we were going to keep people from getting hurt.

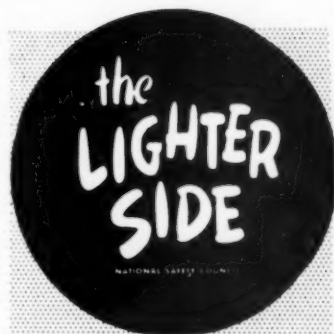
"Learn this and learn it fast—never pester me with a lot of details, but never fail to give me what I need to do my job."

I still remember the embarrassment I felt at not being able to single out from my observations the key facts that I ought to give him. Finally I blurted out the first couple of observations that I could remember, and I knew, as I said them, what he would do—snort in disgust. He told me to go on and write up the report. Then he took all of five minutes to skim over four pages of single-spaced typewriting. He threw the sheets back to me with four sentences underlined. He never did explain himself, and I was five years in the safety business learning why he had picked those facts out as being the ones he had wanted to know.

I am trying to see how that lesson applies to my situation today. One thing I do see—about half the correspondence I've been getting out could be eliminated—and in the process I might deal adequately with the remaining half. Another point—Harry is spending about half his time on routine inspections and investigations. If I give him the Galeston assignment instead of taking it myself, if I throw to him half the load of preparing for that committeeman class, I've saved myself at least a week of work and maybe two. The work won't be done the way I would do it, but there is at least a possibility that I'm in a rut and that a new slant like Harry's might be better than mine.

That will mean that instead of putting my new boy thru an intensive training session with me in the office, I'll have to put him out on the shop floor most of the time on inspection work.

His reports won't be as good



and as critical as Harry's. They will miss some things that ought to be caught, and they will stress some things that aren't worth wor-

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Inspect Those Chains!

By H. F. REID, JR.

Here are hints on what to look for during inspection and how to recondition assemblies after inspection

Figure 1. A typical master file card for chain maintenance.

IN MANY plants, chain inspection and reconditioning procedures are standard safety and maintenance operations. Yet despite this general acceptance of the necessity for inspection of lifting equipment, confusion exists as to what to look for during inspection and how to recondition the assembly after inspection. This confusion was pinpointed recently when it was learned that a factory inspector in a midwestern state was recommending periodic annealing of all sling chains.

Such over-all recommendations overlooked the fact that all chain is not produced from the same material and therefore cannot be treated the same in field service. The inspector's recommendations

H. F. REID, JR., is Manager, Technical Service Division, The McKay Company, Pittsburgh, Pa.

were correct and essential for safe operation of wrought iron slings. Applied to alloy chain equipment these same recommendations would endanger the lives of countless workers. Annealing of alloy chain would destroy the combination of high strength and ductility of the material resulting from controlled heat treatment during manufacture of the chain.

This article seeks to clarify inspection and maintenance procedures for the two grades of chain recommended for hazardous, overhead lifting applications—wrought iron and alloy chain—by suggesting a four-point safety program.

In its broadest aspect, a program for the care and inspection of sling chains should consist of four separate, yet closely integrated phases: Report, supervision, inspection and education. Failure

or lack of any one of these subdivisions could impair the success of the entire chain safety program.

Reports

Many companies using sling chains have found it advantageous to maintain a complete case history on each individual sling. This running record provides not only an immediate appraisal of sling conditions throughout the plant, but also contains data valuable for estimating requirements and for making recommendations regarding possible changes in sling practice. Each alloy sling, supplied under the manufacturer's trade-names, usually contains a metal identification link or tag to assist in such control programs. Information contained on this identification link varies with the manufacturer but generally includes one or more of the following:

1. Manufacturer's serial number
2. Size of chain

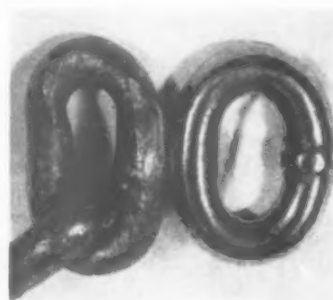


Figure 2. Comparison of new and used 1-inch McK-Alloy links. Note elongation of link due to overloading, also badly scored sides of link. The sling from which this section was removed was reconditioned and returned to service.



Figure 3. Section from 1/4-inch alloy sling showing localized effects of improper rigging. Many links are elongated to the point of locking. Some show effect of twisting. Entire section removed from sling shows effect of severe service conditions.

3. Length of assembly
4. Safe working load limit
5. Date of manufacture

Wrought iron slings also are supplied with a distinctive identification tag or link.

The master file card for a sling should contain all the information shown on sling identification tag. In addition, the master file should contain a service history such as:

1. Date assembly was put in service
2. Location of service
3. Date of each complete inspection
4. Date and possibly description of all repairs
5. Date of discard

Figure 1 is a reproduction of the master report card developed by one chain user to record the case history of each sling in service. This manufacturer supplements the master file record with departmental records of "in-plant"



Figure 4. Pear-shaped link removed during routine sling reconditioning. In addition to having been bent, possibly by faulty rigging, sides of link show numerous deep scores and gouges.

repairs and testing. Red rejection tags are attached to all slings which periodic inspections show to be unsafe and in need of reconditioning.

Supervision

Adequate supervision of the sling safety program is essential for its success. In many organi-



Figure 6. An alloy sling hook damaged by improper loading



Figure 5. Extreme example of wear at bearing surfaces of individual chain links. Note that even this unusually severe wear cannot be detected readily unless links are turned.

zations, one specific individual has complete responsibility for all chain lifting equipment used throughout the company. It is the duty of such an individual to:

1. Provide for periodic inspection and recording of data.
2. Arrange for adequate storage facilities for assemblies not in service.
3. Make final decision regarding disposition of all assemblies rated unsafe on inspection.
4. Make recommendations regarding the size and type of assemblies best suited for the applications of each department.

Inspection

The heart of any sling safety program is inspection. Such a program should provide for two types of inspection, daily inspection by factory personnel and periodic complete link by link examination by the control group. Dual inspection is necessary because each time an assembly is used, it pos-

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So You Like Checklists, Too?

By PAUL W. BEEDLE

Depending on how it's used, a checklist can be a useful accident-prevention tool, or just a crutch

LIKE many other gadgets or gimmicks which can be used in accomplishing management's objectives, checklists have their shortcomings as well as their good points.

From personal experience it seems that much of the good that could be accomplished by their use is overlooked by the very individuals who have most to gain by their use. This oversight is often just lack of familiarity with this idea which, as applied to their accident-prevention responsibilities, is a very excellent one. An attempt is being made in this article to outline for the busy line supervisor and executive some of the angles which will help him to see how and why he should add this device to his kit of accident-prevention tools.

One important angle is the fact that too often checklists are used to whitewash or salve the user's

PAUL W. BEEDLE is with Paul W. Beedle & Associates, Management Counsel, New Lenox, Illinois.

conscience. After one has become a confirmed addict of this bad habit, he can even become so caloused that he makes his safety inspection at his desk. No safety inspection made that way is ever of any value. Such a checklist, no matter how well prepared, won't do any good. In fairness to the checklist idea however, we must hasten to point out that until such an individual's thinking is re-oriented and properly implemented or properly activated, developed or whatever is necessary to give it some plus value, nothing is going to do any real good, not even a personally escorted tour led by an expert.

One move in the right direction for each individual who could use a checklist to good advantage is for him to write his own list after he has thought his way through to his own objectives in using the idea. Once his mind has gone through this process, he will more fully realize the futility of "doing it the easy way." If ever he in-

dulges in an inspection from his desk, one effective way to "put him on the water wagon again" is to remind him that anybody, even the "inconsequential incompetents," can do just as well as he has.

Now, to get a few "reasons for" on paper, but not necessarily in order of importance or any other order for that matter:

1. It will save him time.
2. It will let his workers know he's thorough.
3. It will also let them know he has a sincere, sustaining interest in protecting them.
4. It will help to save both direct and indirect accident costs.
5. It will give him large amounts of personal satisfaction that he has averted much pain, suffering, loss of income, amputations and even fatalities.
6. It will prove to management that he has management attributes.
7. It will prevent delays, re-scheduling production, damage to dies, equipment, tools.
8. It will help to give the feeling that he is the master of his job and not its slave.

Enough for *Why*; now *How*.

Checklists are used for so many purposes that it pays to collect them. Those individuals interested in leading others to use checklists should accumulate as many as they can of as many different kinds as come along, in a loose-leaf notebook and give each potential user a chance to study them . . . asking some pointed questions about each one when he picks up the notebook. To promote this angle, one sample has been appended to this article. Try to get the users to compete with one another in preparing their check lists, but don't forget to stress quality of the points listed—quality, that is—from the point of view of uncovering hazards.

To check quality, let each one dig out his accident reports for the last three years or so and look them over critically for unsafe conditions and unsafe acts. This can be powerful medicine. Then, if still more motive power is required, work out with him (make him really work at it, too) the total costs, direct and indirect, of

his accidents for a long enough period to add up to real money. Then get him to figure out how much improvement he should make each year. Of course, the boss will be happy to learn about his target.

By this time, the atmosphere ought to be about right to get going. Give him a legal size ruled pad. On the front page, list the various main segments of the list. This will outline the scope. To give you a "for instance," look at the headings on the list with this article. At the top of each page write one heading. Then, when you and the user feel sharp, right after he's had a chance to get his department off to a good start some nice morning, and you have just reinforced yourself with a critical review of his accidents for three years or so (it may help to have copies of those reports with you), then move through his department an inch at a time, you concentrating on looking for hazards and habits, and he looking and recording. Have him put each item that should be checked on the proper sheet (under the proper heading).

If there's any question as to which heading should be used, put it under all headings where it could fit. This is a *must* because your present mission is that of fact-finding or accident-cause-finding, to put it a little more accurately. Then, later, the two of you juggle them to where they should be, adding new headings as the need is revealed. Keep it simple. Most checklists get that "dachshund look" if you don't watch out. And, when too long they sag, until they are too close to the floor, then they bog down much too easily. Keep them simple.

After the list is typed, double-spaced, then tell him to give a copy to his next-in-line and dare him to find some good new items.

Then re-write and call a conference of all users and others who should be interested, and try to combine several lists so as

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FOREMAN'S SAFETY INSPECTION

DEPT. _____ DATE _____

By _____

BUILDING

Floor.....
Aisles.....
Windows.....
Doors, Fire.....
" Regular.....
Stairways.....
Lights, Room.....
" Exit.....
Fire escapes.....
Fire hose.....
Fire ext.....
Scuppers.....
Sprinklers.....
Stretchers.....
Housekeeping.....
WORKING CONDITIONS
Lighting (Special).....
Heat.....
Ventilation.....
Chemicals.....
Noise.....
Stools or chairs.....
Platforms.....
Protective clothing.....
Ladders.....

MATERIAL HANDLING EQUIPMENT

Trucks, box.....
" lift.....
" 2 wheel.....
" scrap.....
" shelf.....
" die.....
" tool.....
" screen.....
" power (mules).....
" elevator.....
" dollies.....
" strip.....
" sheet.....

Hoists.....
Slings.....
Skids.....
Pallets.....
Containers.....
Fibre.....
Steel.....
Wooden.....
Tote pans.....
Shelves.....
Racks.....
Cabinets.....
Shovels.....
Hand scoops.....
Forks.....
Boxhooks.....
Safety cans.....

TOOLS AND DIES

Personal tools.....
Company tools.....
Die storage.....
Die condition.....
Dies needing revision.....

MATERIALS-IN-PROCESS

Aisles.....
Neatness.....
Overloads.....

PRODUCTION EQUIPMENT

Punch presses.....
Bolts, nuts.....
Bearings.....
Die clamps.....
Handles, adj., keys, washers, linkages.....
Clutch, latch.....
Brakes.....
Treadles.....
Belts.....
Beltrasts.....
Flywheels.....
Flywheel guards.....
Crankshafts.....
Non-repeat.....
Tie-rods.....
Safety stick.....
Air valves and pipe.....
Elec. wiring.....
Lighting.....
Operator platforms.....
Point of Operation Guards.....
(adj., & cond.).....
Stock shelves.....
Knockouts.....
Bumper guards.....
Chutes.....
Ram adjustment.....
Feeding devices.....
Choppers.....
Scrap and stock handling.....
Housekeeping.....

Kick & Air presses.....
Anchor bolts & nuts.....
Stroke limit stud.....
Air ejector.....
Ram.....
Foot lever.....
Body bolts & nuts.....
Sweep guards.....
One, two hand safety.....
Punch holder screws.....

Eyelet Machines.....
Puncture proof device.....
Clutch, latch.....
Treadle.....
Motor.....
Belt.....
Switch.....
Bolts & nuts.....
Flange feed-magazine.....
Bench.....

PERSONNEL

Hair Nets.....
Sleeves.....
Shoes.....
Jewelry.....
Safety glasses.....
Face shields.....
Unauthorized use.....
Distractions.....
Overloading.....
Clean or adjust running machines.....
Unsafe acts.....
Horseplay.....

NATIONAL SAFETY COUNCIL

AUDITOR'S REPORT—1953

To the Board of Directors, National Safety Council:

We have examined the balance sheet of NATIONAL SAFETY COUNCIL (an Illinois corporation organized not for profit) as of December 31, 1953, and the related statements of income and expense, changes in net assets employed for the benefit of members and source and application of funds for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We made a similar examination for the year ended December 31, 1952.

In our opinion, the accompanying balance sheet and statements of income and expense, changes in net assets employed for the benefit of members and source and application of funds present fairly the financial position of National Safety Council as of December 31, 1953, and the excess of income over expense and source and application of funds for the year then ended, and were prepared in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ARTHUR ANDERSEN & Co.

March 26, 1954.

COMPARATIVE BALANCE SHEET DECEMBER 31, 1953, AND DECEMBER 31, 1952

ASSETS				LIABILITIES			
CURRENT ASSETS:		December 31		CURRENT LIABILITIES:		December 31	
		1953	1952			1953	1952
Cash	\$	485,438	\$ 396,724	Accounts payable—trade	\$	95,719	\$ 74,701
U. S. Government Securities— Savings bonds, at redemption value		475,811	355,940	Employees' income taxes withheld, etc.		32,927	30,919
Treasury bonds, at cost (market value \$7,956 in 1953 and \$15, 502 in 1952)		7,806	15,313	Deferred income—unfulfilled mem- bership and service contracts.....		848,000	732,000
	\$	483,617	\$ 371,253	Total current liabilities	\$	976,646	\$ 837,620
Accounts receivable, less allowance for doubtful accounts of \$12,574 in 1953 and \$11,359 in 1952 ...		427,925	\$ 418,905	CONTRIBUTIONS AND APPROPRIATIONS FOR SPECIAL PROGRAMS		125,275	100,719
Inventories, at approximate cost which is not in excess of market—				RESERVE FOR CONTINGENCIES		300,000	200,000
Publications and merchandise..	\$	491,796	\$ 464,616	NET ASSETS EMPLOYED FOR THE BEN- EFIT OF MEMBERS: (Per accompany- ing statement)		970,581	985,611
Paper stock, printing and ship- ping supplies, etc.		80,392	57,608				
	\$	572,188	\$ 522,224				
Total current assets	\$	1,969,168	\$1,709,106				
DEFERRED CHARGES	\$	82,947	\$ 88,843				
FIXED ASSETS, at approximate cost:							
		Gross	Reserves				
Leasehold improve- ments	\$256,238	\$ 56,586	\$ 199,652				
Furniture and fixtures	182,924	78,905	104,019				
Printing ma- chinery and equipment ..	36,457	19,741	16,716				
Total fixed assets..	\$475,619	\$155,232	\$ 320,387				
			\$ 326,001				
			\$2,372,502			\$2,372,502	\$2,123,950

NOTE: By action of the Congress of the United States of America in 1953, National Safety Council was organized as a Federal corporation. By appropriate action of the Council, the new Federal corporation assumed the assets and liabilities of the Illinois corporation organized not for profit, as of January 1, 1954. The Federal corporation will continue operations in substantially the same form as the Illinois corporation.

**STATEMENT OF INCOME AND EXPENSE
FOR THE YEARS ENDED DECEMBER 31, 1953 AND 1952**

INCOME:	1953	1952
Dues, publications and services	\$3,195,168	\$3,034,483
Contributions	594,186	538,023
Other income	75,258	43,655
	<u>\$3,864,612</u>	<u>\$3,616,161</u>
EXPENSE:		
Publications and materials	\$1,499,177	\$1,302,349
Technical and research	835,822	730,145
Administrative and general office (including depreciation and amortization of \$34,222 in 1953 and \$26,462 in 1952)	661,959	582,557
Membership, advertising and services	356,658	311,919
Publicity	165,485	144,152
Local chapter and council development	149,112	154,452
Contributive fund solicitation	95,294	99,078
	<u>\$3,763,507</u>	<u>\$3,324,652</u>
EXCESS OF INCOME OVER EXPENSE	<u>\$ 101,105</u>	<u>\$ 291,509</u>

**STATEMENT OF CHANGES IN NET ASSETS EMPLOYED FOR THE BENEFIT
OF MEMBERS FOR THE YEARS ENDED DECEMBER 31, 1953 AND 1952**

Balance at Beginning of Year	\$ 985,611	\$ 794,102
Add—Excess of income over expense, as above	101,105	291,509
	<u>\$1,086,716</u>	<u>\$1,085,611</u>
Less—Appropriation to reserve for contingencies	\$ 100,000	\$ 100,000
Reduction in fixed assets for physical inventory taken in 1953	16,135	—
	<u>\$ 116,135</u>	<u>\$ 100,000</u>
Balance at End of Year	<u>\$ 970,581</u>	<u>\$ 985,611</u>

**STATEMENT OF SOURCE AND APPLICATION OF FUNDS
FOR THE YEAR ENDED DECEMBER 31, 1953**

SOURCE OF FUNDS:	
Excess of income over expense	\$ 101,105
Noncash charges against income and expense (provisions for depreciation and amortization)	34,222
Increase in contributions and appropriations for special programs	24,556
Decrease in deferred charges	5,896
	<u>\$ 165,799</u>
APPLICATION OF FUNDS for net additions to fixed assets	44,743
INCREASE IN WORKING CAPITAL	<u>\$ 121,036</u>

Wire from Washington

By **HARRY N. ROSENFELD**
Washington Counsel, National Safety Council

THE PACE of legislative activity in Washington, affecting safety matters, quickened toward the end of the first half of the legislative session.

Highways

The Congress enacted, and the President signed into law, a bill continuing the 2 per cent gasoline excise tax.

Federal-aid highway legislation made considerable progress toward enactment. The House passed H.R. 8127 which authorized a total of \$875,000,000 annually for federal highway-aid. The Senate Committee's bill, S. 3184, increased the amount to \$1,010,000,000 and removed any statutory linkage between the highway-aid program and the gasoline excise tax provisions.

Industrial

Great interest was shown in the problem of atmospheric and water pollutions. S. 3115 (Kuchel) would amend the Internal Revenue Code to permit accelerated amortization of any devices removing atmospheric pollutants. The bill's purpose is to encourage industry's attempts to alleviate air pollution, popularly known as smog or smaze. H.R. 8361 (Kersten) is directed to the same end in connection with facilities constructed to aid in the abatement and control of air and water pollution.

Another approach to the same problem is being planned by the Hoover Commission on Organization of the Executive Branch of Government. Its Task Force on Water Resources and Power has announced the holding of hearings on a wide variety of subjects, including pollution abatement. These hearings are scheduled to be held in San Francisco, California, on

May 3rd, 1954, in Denver, Colorado, on May 17, in Chattanooga, Tennessee, on June 1, and in New York City on June 14, 1954.

Three other bills are directed toward the establishment of a National Minerals Advisory Council within the Department of the Interior, to be appointed by the Secretary of the Interior, and to advise the Secretary concerning mining and the minerals industry, including matters of policy. These bills are: S. 3157 (McCarran), H.R. 8653 (Engle), and H.R. 8657 (Miller).

The general field of vocational rehabilitation was scheduled to come under consideration in hearings before the Senate Committee on Labor and Public Welfare. S. 2570 (Murray) which proposed the establishment of a new Federal Agency for Handicapped, has several specific safety provisions which were outlined in the Wire from Washington for April.

Airplanes

S. 2647 (McCarran), which would rewrite the Civil Aeronautics Act of 1938, was scheduled for lengthy consideration in hearings lasting throughout the month of April. These hearings are said to be the first thorough reconsideration of the subject since 1938. Among other features of this extensive bill is the reestablishment of an independent Air Safety Board which was created in the 1938 Act but abolished in 1940.

Senator Stuart Symington, formerly Secretary of the Air Force, expressed on the floor of the Senate a lack of expectation of success from the efforts of the Air Coordinating Committee's activities. He proposed that the President appoint an Air Policy Commission,

and that the Congress appoint a Joint Congressional Aviation Policy Board, all to the end of a coordinated policy for airpower.

The Air Coordinating Committee released an interim report in connection with its pending air policy review which had been requested by the President. This interim report indicated that the target date for completion of its report, initially set for April 1, 1954, would have to be deferred. The Air Coordinating Committee also announced the organization of a special working group to study the special requirements for lighting and marking structures that may be hazardous to air navigation.

H. J. Res. 478 (Bosch) directs the Civil Aeronautics Board and the Air Coordinating Committee to investigate the so-called "Rome Convention" which limits payments arising out of ground accidents caused by overseas air commerce, and to report to Congress as to the advisability of amending the convention's restrictive limitations on liability.

Marine Safety

In the Senate, hearings were held on S. 602 (Tobey) concerning the loading, storing and securing of bulk cargoes, and on S. 2072 (Purtell) which relates to the annual inspection of small passenger-carrying vessels. H.R. 8414 (Campbell) also would provide additional safeguards for motorboats not exceeding 65 feet in length.

School Safety

Under the workman's compensation provisions for teachers of the District of Columbia, the U. S. Department of Labor's Employees' Compensation Appeal Board held that a teacher was entitled to compensation benefits for an off-premises injury which occurred during her lunch hour. The teacher was on her way to lunch, off the school premises, when she saw a pupil, also off the school premises, apparently moving out into the

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42nd Congress — October 18-22

CHICAGO will be host to some 12,000 delegates to the 42nd National Safety Congress and Exposition the week of October 18-22.

More than 200 sessions will be held in six hotels—Conrad Hilton,

Blackstone, Congress, La Salle, Morrison and Palmer House. The entire Exposition will be held again in the Conrad Hilton.

Accommodations for many groups will be improved this year,

since several larger meeting rooms have been secured. Dates and hotel assignments for all sectional, divisional, subject and general sessions are given in the schedule below.

DATE AND HOTEL ASSIGNMENTS

	(Hotel)	Oct. 18 Monday AM PM	Oct. 19 Tuesday AM PM	Oct. 20 Wednesday AM PM	Oct. 21 Thursday AM PM	Oct. 22 Friday AM
Sectional Sessions						
Aeronautical Ind.	Hilton	X		X		
Air Transport	Hilton	X				
Auto & Mach. Shop	Congress			X	X-jt.	
Cement & Quarry	LaSalle			X	X	
Chemical	LaSalle	X	X	X	X	
Coal Mining	Hilton	X	LX	X		
Commercial Vehicle	LaSalle		X	X	X-jt. L	
Construction	Hilton	X	X			
Electrical Equip't.	Hilton			X	X	
Fertilizer	LaSalle	X	X			
Food	Morrison		X	LX9	X	
Glass & Ceramics	Congress	X	X			
Marine	Morrison		X	X	B	LX
Meat Pkg.—Tng. & L.	Congress	LX	LX			
Metals	Hilton	X	X	L	X3	
Mining	Hilton-Congress	X	LX	X	X	
Occ + Health Nursing	Hilton		X	X	L	
Petroleum	Hilton	X	X3	X2	X	
Power Press	Congress		X		X-jt.	
Printing & Publ'g.	Hilton	X		X		
Public Employee	Hilton		X	LX	X	
Public Utilities	Hilton		X		X3	
Pulp & Paper	Hilton	X	X	X2	LX5	
Railroad	Morrison		X	X	X	
Rubber	LaSalle		X	LX		
Textile	LaSalle	X	X	X		
Traffic	Congress	X	X	X	X	
Transit	LaSalle		X	X	X-jt. L	
Wood Products	Hilton	X	X	X		
Divisional Sessions						
Farm	Palmer House		X	X	X	X
Home	Hilton			X	X	
School & College	Morrison	X	X	X	X	X
Women's Activities	Blackstone		X		X	
ASSE—Subject Sessions						
ASSE Ann. Mtg.	Hilton		X			
Subject Session	Hilton & Congress			X	X	X
General Sessions						
Annual Council Mtg.	Hilton	X				
Banquet	Hilton		X	X	X	
Early Morn. Sess.	Hilton			X		X

X One session
X3 Three group sessions
L Luncheon

X-jt. Joint session, two or more Sections
B Breakfast meeting

Cases for Comment

Compiled by **ROBERT D. GIDEL,**

Senior Engineer, Industrial Department, National Safety Council.

Pre-Existing Weakness

On June 24 the employee was walking from the location of a tool cart toward the curb where a new street light pole was being installed. While walking along normally, his left knee gave way and he fell forward to the sidewalk. He stated that nothing unusual occurred; he did not slip nor did he stumble, but that his knee had just cracked and given way. He was taken to the company medical department, where his knee was examined and he was given a heat treatment. He was able to return to work, and lost no time.

On July 31, this same employee had gone to the office to get an order signed. As he was about to enter the door leading to the inner office, another employee, who was standing at this doorway, stepped back and bumped into the employee. When this occurred, the employee stated that he was in the act of taking a step, and that he was knocked off balance and that his left knee cracked and hurt him.

He attempted to continue with his work, but was unable to do so, and was again sent to the company medical department for further treatment. The following day he visited the office of a specialist, who recommended an operation. It was found that he had a torn ligament, and the semi-lunar cartilage was removed.

The committee of judges decided that the occurrence on June 24 was not of the kind to be included as an injury in the rates (even if time had been lost), but that the occurrence on July 31 should be counted in the company's injury rates.

It was noted that during the first occurrence there was no accident or other similar incident involved. In the second instance, the incident associated with the recur-

rence makes this a reportable case. The previous physical deficiency was definitely aggravated by this incident, and the case must be reported.

* * *

Many companies don't realize the potential or existing problems they have with some workers. One company, on special investigation, found that an employee had reported to first-aid more than 30 times in a three-month period. This wouldn't have been brought to light except through a change in administration. After discussing the situation with the employee, he reported only once in the next two months.

Another company with a similar problem transferred the employee to another department, and solved the problem.

Proper records for the individual, periodic follow-up, investigation of all occurrences and an intelligent discussion of the situation with the person involved can in most cases, lead the way to the most effective corrective action.

* * *

Get Doctor in the Act

An employee was taking wire from the back of a truck. The derrick stiff leg slipped and fell on his left foot. The employee was absent from work for one day.

The company claimed that the only reason the man was off work for one day was that when he was taken to the doctor for treatment, he was advised by the doctor to

stay home the next day, until an X-ray could be checked. The doctor was unable to give the employee a report of the X-ray on the same day.

When the doctor was able to determine the result of the X-ray pictures the next day, the employee was told that he could return to work.

The committee of judges determined that this injury should be counted in the injury rates of the company on the basis that the evidence was not sufficient to establish that the person could have worked following the injury.

* * *

In too many instances, the doctor servicing injured employees doesn't have the slightest knowledge of the problems of the safety man. Nor is he too familiar with the hazards or exposures of the operations in which the company engages.

Get the doctor in on the act. Take him on a tour of your operations, request his suggestions and explain to him your objectives and your problems which may involve him. If the doctor isn't interested, maybe you need one who will be.

Your time, the injured's time and all the mechanics involved when an accident occurs can be handled much more smoothly when an understanding has been worked out in advance.

* * *

Accidents Off Premises

During his regular tour of duty, an employee was repairing certain company equipment on the employer's premises adjacent to a canal. A third party contractor, having no connection, contractual or otherwise with the employer, was at the same time performing certain work for another company at a point in the canal, off the employer's premises, and approximately 200 feet from the employee's position. The third party contractor set off without warning a dynamite charge which blew a large ball of mud into the air. This object descended on the employer's premises and struck the employee in the back—resulting in a disabling injury.

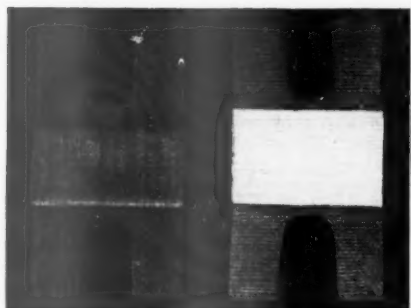
There was a difference of opinion between the judges in the analysis of this case, but it was

—To page 129

A COMPANY competing for an outstanding safety record wants to make sure that no accidents are wrongly charged. This can be done through **ASA Standard Code Z16.1-1945**. If there is any doubt as to interpretation of the Code, the Committee of Judges of the American Standards Association Sectional Committee is available to review the facts.

A few of these cases are discussed briefly in this department. It is hoped that they will aid readers not only in determining the chargeability of accidents but also in planning preventive measures.

NEW! unit first aid packets



KNUCKLE BANDS

These new bandages are a necessity for every modern first aid supply. They are the only convenient method of covering knuckles, fingertips and other places where ordinary dressings are inadequate. Sterilized and packaged individually in unit packs of 8 or 16.



VASELINE GAUZE DRESSING

Vaseline petrolatum gauze dressings are quick, complete, soothing emergency treatments for burns and scalds. Packed individually in sterile foil containers, dressing can be readied in seconds for application.

*124



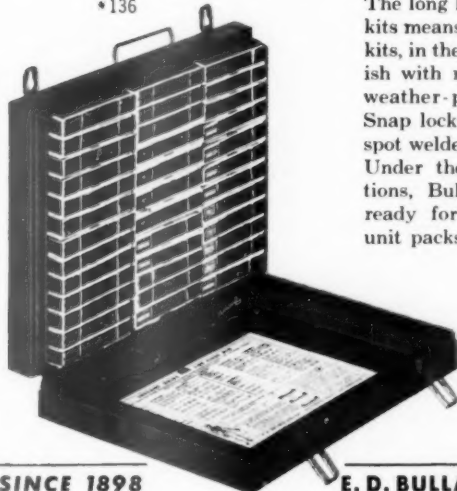
*110



*116



*136



first aid kits

In times of emergency when seconds count, Bullard safety green unit first aid kits prove their value. Flick open the welded snap locks, exposing the clearly marked unit packets, the right treatment with the right application is instantly at your fingertips.

built to last

The long life of Bullard first aid kits means savings to you. These kits, in the new Hammertone finish with removable gaskets, are weather-proof and dust-proof. Snap locks and back hinges are spot welded to prevent air leaks. Under the most rugged conditions, Bullard kits are always ready for instant use. Special unit packs are available.

FREE

Write for descriptive literature on first aid or other Bullard safety equipment.

Distributors in principal cities



ANTISEPTIC SWABS

Now Bullard antiseptic swabs are color coded for quick identification. Just squeeze one of these small swabs and instantly just enough antiseptic is released for application to small wounds or cuts.

- Red - Tincture of Iodine
- Orange - Mercurochrome
- Green - Tincture of Metaphen
- Blue - Tincture of Merthiolate
- Maroon - Zephiran Chloride

Available in bulk or unit packs for first aid kits.

BULLARD
Everything in Safety

CYLINDRICAL FIRST AID KITS
POCKET PACKS • IMUN OAK
IMUN IVY • VENEX

EVERYTHING
BULLARD
IN SAFETY

T. M. REG.

SINCE 1898

E. D. BULLARD COMPANY, 275 Eighth St., San Francisco, California

THE SAFETY VALVE



Where Cross the Crowded Ways of Life

THE SAFETY MOVEMENT has been indebted to the clergy of the various faiths for many an impressive safety message but we could use more help from this source. In this connection, however, I have to confess that I haven't done a very effective job of promoting the cause of safety with my own pastor.

In justice to the ministers, priests and rabbis, few laymen realize how many demands are made on them to support various causes in the pulpit. These range from worthy, substantial causes down to crackpot schemes. That is something to remember when we feel neglected.

A comparison of the problems of traffic with those of life itself provided the theme of a pastoral prayer by the Reverend David H. Debbink in the Congregational Church of Whiting, Ind. It impressed Miss Lillian Stemp, one of the printing industry's leading safety exponents, who sent us a copy. Here it is in part:

"We are grateful for the opportunity to come—to come not as to some abstract theory but with warmth as people would talk with Jesus.

"We come from the hurry and confusion—from the noise and stagnation. We come from the traffic jams of our lives.

"We have wanted to turn to Thee but found ourselves in the wrong lane.

"We have wanted to serve but became so entangled in the rush traffic of the rest of our lives that we never made it.

"We have wanted to love others more fully but found unconscious tie-ups within ourselves.

"We have wanted to hurry to get things done right away but found speed limits as to how fast we could move.

"We have wanted to see the fascinating scenery but found the road dull and monotonous.

"We ask Thy direction!"

A Very Human Lot

"Those of us who work here give the business its character, if it has any," says William Feather, publisher of syndicated house organs and writer of delightful essays on everyday topics.

"At times we are vain, selfish, suspicious and jealous of one another, and occasionally we are plain lazy, but over all we insist on making a success of this enterprise.

"There isn't a single genius among us.

"However, all of us work hard enough between 8:30 and 5, five days a week, to meet any challenge, to prosper in any economic climate."

Ghosts

Mailing lists, even when revised frequently, often contain (literally) dead timber, and strange things may happen. Here's an example from *The Reporter of Direct Mail Advertising* via *The Inland Printer*:

"Gadget mailings sometimes have an unexpected kickback. Take these two actual pieces mailed to an advertising manager. The first had a plastic moving eye tipped to the letterhead. Balloon caption read: 'This will open your eyes, Mr. Jones.'

"The new advertising manager who received it, sent it back with this note: 'This I want to see. Mr. Jones died six weeks ago.'

"A second letter (list unchanged) arrived with a checkerboard design on the letterhead with a checker man tipped on. Balloon read: 'It's your move, Mr. Jones.'

"Still trying to get the list corrected, the advertising man wrote, 'If he moves, I leave.'"

In This Issue

Two widely prevalent misconceptions about safety work are discussed this month. In the leading article, Harry H. Hillman reminds management representatives that there is more to preventing accidents than hiring a safety director and starting him off with a pat on the back. (Page 18). And on the other side, John Roche hands some straight talk to safety men who think their problems will all be solved when they get management on their side. (Page 28)

* * *

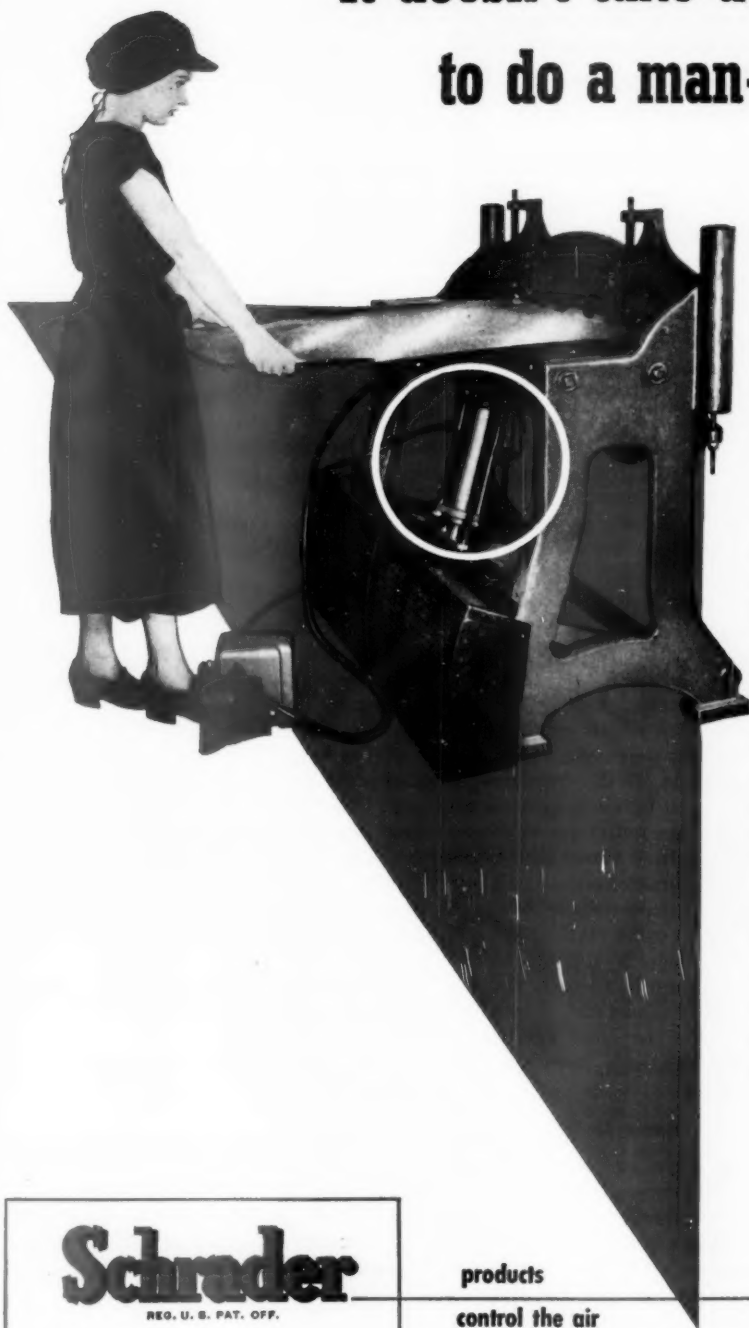
Nearly 30 years ago the NEWS carried a story about Studebaker's safety program using for the title the company's slogan, "Studebaker Folks Working Together." They're still emphasizing the working together theme—this time on an effective plant housekeeping program. (Page 26)

* * *

Following close on the organization of the National Safety Council in October 1913 was the launching of a local safety council in Bethlehem, Pa., to serve the important industrial area of the Lehigh Valley. This Council, now entering its 41st year, is the oldest continuously operating safety organization affiliated with the National Safety Council. (Page 22)

Carman Fisk

It doesn't take a heavyweight to do a man-sized job



Before these shears were shifted to air operation the entire weight of a man was required on the foot treadle to cut the sheet metal.

All this is changed now. A light touch of the girl's foot on the pedal puts all the power of the Schrader Air Cylinder to work, sending the knife-edge through the metal.

This is just one example of how air cylinders can speed up production and reduce fatigue . . . one of many hundred applications of Schrader cylinders and valves. It will pay you to design your controls around Schrader air cylinders and valves.

To find out how Schrader air control products can be put to work . . . to boost production . . . lessen operator fatigue . . . increase safety . . . send us a letter outlining your particular requirements, your idea or fill out the coupon below.

Schrader

REG. U. S. PAT. OFF.

products
control the air

Mail This Coupon Today

Air Cylinders • Operating Valves •
Press & Shear Controls • Air Ejection
Sets • Blow Guns • Air Line Couplers •
Air Hose & Fittings • Hose Reels • Pres-
sure Regulators & Oilers • Air Strainers
• Hydraulic Gauges • Uniflare Tube
Fittings

A. SCHRADER'S SON
Division of Scovill Manufacturing Company, Incorporated
452 Vanderbilt Avenue, Brooklyn 38, N. Y., Dept. R-7

I am interested in more information on.....

Name.....Title.....

Company.....

Address.....

THE ACCIDENT BAROMETER



Prepared by the Statistical Division,
National Safety Council

All Accidental Deaths

THE TREND of accidental deaths in January was upward compared to 1953. The fatality toll was approximately 7,400, or 1 per cent above the total of 7,300 in January a year ago. The increase in deaths from home accidents was nearly offset by a decrease in work accidents. Deaths from motor-vehicle and public non-motor-vehicle accidents numbered about the same as last year.

Motor-Vehicle Deaths

The motor-vehicle death total was approximately 2,900, no change from January, 1953. However, compared to 1952, it was an increase of 9 per cent.

The January death rate per 100,000,000 vehicle miles was 7.1, the same as in January a year ago.

Of the 46 states reporting for January, 26 had fewer deaths, 1 had the same number and 19 had more deaths. Reporting cities with populations of more than 10,000 showed a reduction of 14 per cent from January, 1953. Of the 491 cities reporting, 34 showed increases, 298 had no change and 109 had decreases.

Regional changes from 1953 in the January death totals were:

North Atlantic	-14%
South Atlantic	+ 3%
North Central	+ 6%
South Central	+22%
Mountain	-15%
Pacific	-21%

Work Accidents

There were about 1,100 deaths from work accidents in January, or 100 fewer than occurred in January a year ago.

The average frequency rate (dis-

abling injuries per million man-hours) in sixteen sectional accident prevention contests conducted by the National Safety Council was 5.52, an 11 per cent reduction from January, 1953. The frequency rate for plants in community council contests was 6.63, an increase of 5 per cent over last year. In these contests the severity rate (days lost per thousand man-hours) was 0.43, a reduction of 9 per cent.

Public Deaths

The January death total for public non-motor vehicle accidents was 900, about the same number as occurred in 1953. Increases in deaths from falls and firearms accidents were offset by decreases in deaths from drownings, burns and transportation accidents. There were large reductions in deaths of persons 15 to 24 years of age and children under 5 years old. Deaths of children 5 to 14 years old also were less numerous. Deaths of persons in the other age groups showed moderate increases over last year.

Home Deaths

The home accident death total for January was 2,300, or 12 per cent over January last year. There was a large increase in deaths from mechanical suffocation; a moderate increase in fatal burns; and a small increase in unclassified home accidents. Small decreases occurred in deaths from falls and firearms accidents, while fatal poisonings numbered about the same as in 1953. Most of the increase was recorded among children 5 to 14 years old but deaths of children under 5 years of age and persons in the age groups 25 to 64 years

old also showed increases. There were small decreases in deaths of persons 15 to 24 years old and persons 65 years and over.

Preparation Needed for Psychological Warfare

The public needs to be prepared for psychological warfare, in the opinion of Dr. Ozro T. Woods, Dallas, mental health consultant to the Federal Civil Defense Administration.

Dr. Woods spoke recently before the closing session of the 14th annual Congress on Industrial Health. The two-day meeting, held in Louisville, Ky., was sponsored by the American Medical Association's Council on Industrial Health.

Dr. Woods, who participated in a symposium on preparations for disaster, pointed out that there was virtually no panic in England or Germany during the extensive bombings of the last war, adding: "They knew what to expect and had plans ready to meet the danger. The Japanese did not panic from the bombs they knew about, but when the new bomb that they had never dreamed about turned the heavens wrong side out, they had the fear we all have of the unknown."

He said this nation was "dangerously unprepared with plans so people will know what to do."

"The preparation for disaster is only an intelligent part of modern living," Dr. Woods stated. "If each community will plan and organize so that it can effectively use all its resources in the event of disaster, it has done all that is possible. If a community cannot meet its disaster needs, it must have help from other communities."

"We must store supplies and organize mobile support at state and national levels. We must have trained people to coordinate the program. This is civil defense—it is disaster preparation for war, or for natural or industrial disasters."

Dr. Woods called upon industry to furnish leadership in acquainting the public with the dangers.



*For greater safety,
handling ease, and adaptability...*

Give me the Polisher-Scrubber with THESE EXTRAS!



**A 600 Series
Finnell. Four
sizes: 13, 15,
18, and 21".**

**Steel
Brush
Cover**

The combination of extras at right not only wins the appreciation of maintenance men, but appeals to thrifty, safety-minded management as well. In operating a 600 Series Finnell, no effort is required to hold the feather-touch safety switch to 'on' position. And the switch works with either hand from either side of handle! When grasp is released, the switch automatically disengages and the machine stops. *Brush-propelled*, it glides over the floor with virtually effortless guidance. True

balance is attained through proper distribution of weight per square inch of brush surface in relation to thrust and brush speed. Indicative of the quality construction of a 600 Series Finnell are: G. E. Drip-Proof Capacitor Motor (furnishes abundant power)... worm gear of special phosphorus gear bronze, meshing with worm of hardened, ground, and polished gear steel... New Departure Ball Bearings. Although essentially a polisher-scrubber, with suitable accessories the machine can also be used to apply wax, dry-scrub, steel-wool, sand, and grind.

Another of the extras offered by Finnell is nation-wide service! There's a Finnell Floor Specialist and Engineer near you to help solve your particular problems... to train your operators in the proper use of Finnell Equipment... and to make periodic check-ups. It's also good to know that Finnell makes everything for floor care! For demonstration, consultation, or literature, phone or write nearest Finnell Branch or Finnell System, Inc., 2205 East St., Elkhart, Ind. Branch Offices in all principal cities of the United States and Canada.

- + 2-Way Automatic Feather-Touch Safety Switch. Works from both sides of insulated handle.
- + Combination Worm Gear and V-Belt Drive. Provides extra protection for motor and gears.
- + Center Brush Feed. Eliminates splashing of equipment, furnishings, and mopboards.
- + Truly Balanced and Really Quiet Operation!
- + Dispenser (accessory) for Applying Hot Wax Mechanically. This process reduces frequency of waxing.

FINNELL SYSTEM, INC.

Originators of Power Scrubbing and Polishing Machines



**BRANCHES
IN ALL
PRINCIPAL
CITIES**



The program is succeeding in making workers more safety-minded. Here an employee of the Birdsboro Steel Foundry & Machine Co., uses his respiratory and eye protection on a dangerous job.

A Program for Both Large and Small Plants

By W. WILLIAM CARSON, Jr.

ONE of the major problems confronting any association engaged in servicing its members is to foresee the need for programs and activities to benefit both small and large concerns.

Although the Manufacturers' Association of Berks County, Reading, Pennsylvania, has been chartered since 1919, its many and varied activities did not include safety, until the latter part of 1951, when a member of the National Association Manufacturers' Committee on Industrial Health and Safety, Paul R. Hafer, returned to Berks County from a New York conference of this national group

W. WILLIAM CARSON, JR., is safety director of the Manufacturers' Association of Berks County, Reading, Pa.

inspired to see what the chances were for arousing the interest of our member firms in this work.

His remarks before the regular monthly meeting of the Board of Directors of the Association prompted the Board to recommend the establishment of some type of safety activity. With this thought in mind, The Association's office secured advice from surrounding localities and National Safety Council material on the formation of a safety committee.

After reviewing this material the Board of Directors asked Hafer, president of the Boyertown Auto Body Works and Boyertown Body & Equipment Co., to serve as chairman of a special safety committee of the board.

In order to determine, as a start, what companies of our total membership would be interested in a safety plan, letters were addressed to our entire mailing list on December 28, 1951. In this initial letter Chairman Hafer said, "The Board of Directors felt the need for an awakening in the minds of all members to the constant threat of accidents in their plants."

Shortly afterwards approximately 44 concerns indicated they were interested in this program and Hafer selected a steering committee of several top safety representatives of Berks County concerns. A meeting of this committee was called and a very enlightening discussion period resulted in the formation, as a start, of the 9-Point Safety Code which was flexible enough to adapt for use in any size plant.

On January 31, 1952 the Committee again met and decided to hold a Kick Off Dinner around the first week in March. Representatives from the National Safety

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Francis Corrigan, safety engineer, The Carpenter Steel Co., discusses merits of safety helmet with a worker.

Announcing the **NEW** amazing **SELLSTROM** *Fiber Glass* **WELDING HELMET**



Because of its greater strength and water resistance, the new Sellstrom No. 230 Fiber Glass Helmet should outlast 5 ordinary fiber helmets. It is available with either the Standard Front Loading Plate Holder, as shown above, or the new "S" Lift Front Plate Holder shown below.



Your Choice of Headgear

The Sellstrom No. 230 Fiber Glass Helmet may be fitted with either the Standard Headgear No. WMXX shown above or the new Sel-O-Matic "M" model headgear shown at the right — which can be easily adjusted with one hand while the helmet is on the head.



**Designed
for COMFORT**

*The only helmet with these
advanced features*

1. 400% Stronger Than Ordinary Helmet

An 8 ounce steel ball, dropped from a height of 5 feet onto the Sellstrom Fiber Glass Welding Helmet, merely bounced from the helmet. The same ball, dropped from the same height onto an ordinary fiber helmet, cracked it.

2. A Better Insulator from Heat

Made of Fiber Glass, the perfect insulator, this Sellstrom Helmet transmits less heat than ordinary helmet — keeps face cooler.

3. More Resistant to Moisture

After immersion for 48 hours in salt solution of 160°F., the Fiber Glass Helmet absorbed less than 1/2 ounce of moisture. Holds its shape indefinitely.

4. Lightest Helmet of Its Kind

5. Choice of Plate Holders and Headgear

TEST A SAMPLE — Satisfaction Guaranteed!

Let us ship you a sample Sellstrom No. 230 Fiber Glass Helmet equipped with the famous Sel-O-Matic headgear and the new "Lift Front" plate holder on a 30 day memo, with the understanding that if you are not entirely satisfied, you can return it for credit. We will also give you the name and address of a nearby dealer who can supply your future requirements. The price — no higher than for an ordinary quality helmet. Send for your sample today!



Ask your dealer or write us for a copy of this 60 page buying guide to more than 300 Eye and Face Safeguards.

Mr. Dealer: The interchangeability of headgears and plate holders for this new Sellstrom Fiber Glass helmet means maximum profit and minimum inventory for you. Write for details!

SELLSTROM MANUFACTURING COMPANY
422 North Aberdeen Street • Chicago 22, Illinois

OUT OUR WAY



Best value—best seller!

SOL-SPEEDI-DRI

For keeping floors spanking clean — absolutely slip-proof — Sol-Speedi-Dri is way ahead of other industrial oil and grease absorbents. Proof? Industry buys more of it than any similar product. And here's why . . . it spreads fast, covers plenty of ground, "dry-cleans" thoroughly. You can count on consistent quality, too — careful laboratory controls insure that. Why not try it yourself? Send coupon today for free sample.

SPEEDI-DRI CORP. 210 W. Washington Sq., Philadelphia 5, Pa.



Warehouse stocks maintained in principal cities of the United States and Canada.

Inquirers in New York, New England, and New Jersey should write to Speedi-Dri Corp. Elsewhere in U.S. to Waverly Petroleum Products Co., 1724 Chestnut St., Phila. 3, Pa. In Canada, G. H. Wood & Company Ltd., Toronto. Branches throughout Canada.

FREE SAMPLE Fill out the coupon and mail today for free sample and literature.

Name _____

Address _____

City _____

NS-5/54

State _____



New Colors Approved In Revised Code

SAFETY for the man on the job is the purpose of the new American Standard Color Code, just revised and released to industry.

The American Standard Safety Color Code for Marking Physical Hazards and the Identification of Certain Equipment is the revision of a war standard. It uses three new colors needed to warn workers against potential dangers.

The recently-born radiation perils will be announced by high-visibility purple. This color was adopted into the Code from the Atomic Energy Commission, which employs the color in a broken-propeller-shaped symbol. The code suggests that purple be used in rooms and areas, indoors and outdoors, where radioactive materials are stored or handled. Burial grounds for this material and contaminated equipment are also marked by this color. Purple signal lights may be used to indicate when radiation-producing machines are in operation.

Two other colors added to the revised code are: Orange, will be used to designate dangerous parts of machines or energized equipment that may cut, crush, mangle or otherwise injure, and to emphasize dangers from exposed or unguarded parts of machines. Blue, long used as a signal by railroads, will warn employees not to attempt to operate machines while down or under repair.

The revised edition of the War Standard is expanded in detail. It includes technical definitions so that the colors recommended can be reproduced and lists physical samples to aid in putting the recommendations into effect.

Still a part of the code are the long-used, nationally accepted:

Red for danger and fire.

Yellow for caution and physical hazards, such as striking against, falling, tripping, etc.

Black and white for traffic—dead ends, stairways, directional signs—and housekeeping signs.

Green for the location of safety equipment.

A psychiatrist gets paid for asking you the same questions your wife asks for nothing.



It Takes Foresight **TO SAVE EYESIGHT**

Factory workers are willing to wear eye-safety goggles which reduce permanent or temporary disfigurement when K-LENS-M Liquid Lens Cleaner and K-LENS-M Anti-Fogging Liquid has eliminated the common excuses that safety glasses are dirty, foggy, smeared or scratched.

K-LENS-M
REGISTERED TRADE MARK

K-LENS-M
REGISTERED TRADE MARK

Encourage your employees to practice eye-safety by installing efficient and economical goggle cleaning units . . . the K-LENS-M Lens Cleaning and Anti-Fogging Station. This compact unit contains the K-LENS-M Lens Cleaning Liquid; K-LENS-M lint-free lens tissues, with *sanitary* tissue disposal space; and the K-LENS-M Anti-Fogging attachment.

K-LENS-M . . . The Acknowledged Leader in the Lens-Cleaning Field

K-LENS-M Liquid Lens Cleaner is the most effective and economical cleaner for both glass and plastic; it cleans quickly and easily with no filming or scratching. K-LENS-M Anti-Fogging Liquid keeps goggles and glasses free of fog for the entire workday. Safety Engineers endorse these K-LENS-M products and leading companies throughout the world use K-LENS-M. *Use K-LENS-M* in your eye-safety program and *see* the results.

Send for **FREE** sample on your company letterhead.

THE **WILKINS** CO., INC.
CORTLAND 1, N. Y.



K-LENS-M Trademark registered U. S. & Canadian Patent Offices

SMALL BUSINESSES and ASSOCIATIONS

By A. M. BALTZER and ROBERT D. CURRIE

*Small Business Program Staff
National Safety Council*

Small Business Session Reprint

Small Business Safety Through Associations, a fourteen page reprint from Volume 16 of the 1953 Congress Transactions is now available; single copies free — quantity prices the same as other special releases. This reprint covers talks made at only the Small Business Session on October 20th, 1953, which achieved a nice balance between activities which proved successful at both local and national association level.

More About Noise

On April 7 the Illinois Manufacturers' Association arranged a conference on "Noise in Industry," co-sponsored by the Greater Chicago Safety Council and Chicago Chapter, A.S.S.E. The purpose was to acquaint industrial management, particularly in the smaller companies, with this current problem which is receiving increased attention.

This is just another example of an association supplying a valuable cooperative service to members who individually may not have the facts or the facilities to deal with such problems.

1954 Associations Award

Brochures announcing the Council's "Award for the promotion of safety in small business by associations" have been sent to approximately 200 industrial association members of the Council. As in 1953, handsome plaques will be presented at the Congress to qualify associations.

Award rules give 25 per cent credit for improvement in the injury experience of the association's

members and 75 per cent credit for the association activity aimed at getting companies to do more to control accidents.

Fred Braun, Vice-President of Employers Mutuals of Wausau, heads a Committee of Judges which includes the same national organizations as in 1953.

Letter Service Survey

For many moons we have been sending letters of safety pointers or reminders to our smaller members. One month a letter is aimed at the employer. The next month, a letter is designed for his employees, to be published or put on the employer's letterhead and post-

ed or distributed to his employees.

We wondered for some time whether we were shouting down a well or if these letters were serving their purpose. Now we know the letters are worthwhile.

Returns of questionnaires recently mailed to most of our smaller members normally receiving this service were immediate and numerous and, to say the least, very encouraging. Results of our survey based on substantially more than 100 returns, show that:

87 per cent feel that these letters are serving their intended purpose.

65 per cent route the employer letter to other executives or supervisors.

81 per cent indicated they would like the employer letters sent more frequently, or every other month as now.

62 per cent indicated the same for the employee letter.

The comments from our members on the return questionnaire form are indeed interesting and enlightening. Here are some of them:

"Good thinking—swell job—keep them coming."

"We consider the employee letter most useful and effective."

"One of your best services."

"Essential contribution toward an effective safety program."

We certainly appreciate the wonderful response received from our smaller members. Many thanks!

If you would like to see samples of these letters, they are yours for the asking. Just address your request to Small Business Program, National Safety Council, 425 N. Michigan Ave., Chicago 11.

Safe Cutting

Cutting oily steel plates can be hazardous because flames from the cutting torch often heat the oil deposits to the ignition temperature quickly, causing fires.

One way to avoid such fires, say engineers of the Ansul Chemical Company, of Marinette, Wis., is to spread a thin layer of dry chemical over the area to be cut. By doing this, the flames are extinguished before they can get started, and production remains uninterrupted.



The Graphic Arts Industry Safety Rally was presented by the New York Club and International Association of Printing House Craftsmen with the collaboration of 18 cooperating organizations. The attractive brochure cover above is a fine example of promotional literature used in stimulating attendance at the rally.

STANDOUT STYLE and STAMINA

PLUS COMFORT IN EVERY PAIR OF

Iron Age

Steel Toe

SAFETY SHOES



The Safety Shoe
for Industrial America



IRON AGE "MOC-WEAVE"
No. 614, Sizes 5-12, Widths A-E

IN 1953

More Workers Wore Iron Age Safety Shoes Than Ever Before

The 1953 sales figures again show Iron Age to be America's fastest growing line of safety shoes. We didn't acquire this distinction by any magic formula. We earned it by paying meticulous attention to every order; seeing that the customer got what he wanted when he wanted it. True, we high-style many of our safety shoes to look at home on either carpet or concrete. And we see to it that all are made of only the best

materials with the finest workmanship.

Recently we announced additional representation in several territories—expanded our productive and warehouse facilities to handle an even greater volume. This is our way through bettered service, to thank those who have made our growth possible. It is our tangible expression of faith in the future of American industry—and a confidence you can share in your own operations.

Iron Age DIVISION H. CHILDS & CO., Inc. Pittsburgh 12, Pa.

GREEN CROSS NEWS



Activities of Local Safety Councils and Chapters

Compiled by TOM A. BURKE

Director of Local Safety Programs, Field Organization, NSC

George G. Traver Heads New Jersey Council

George G. Traver has been appointed executive vice president and secretary of the New Jersey State Safety Council, effective March 8th, it has been announced by Richard V. Mulligan, president.

During the past nine years, Mr. Traver has served as manager of the public relations department of the National Board of Fire Underwriters, where he was in charge of a broad program of public relations, including national advertising, publicity, motion pictures, employee information and general educational activities, including fire safety.

From February 1929 to September 1942, he was manager of the Greater Chicago Safety Council and for several years served on the executive committee of the National Safety Council as a representative of the community safety organizations. He is well known in the safety council field throughout the country, as well as in fire prevention circles.

Portland Cartoon Award

Arthur Bimrose, editorial cartoonist for the *Portland Oregonian*, was one of the seven winners in the National Safety Council Annual Christmas Cartoon Contest in which 154 of the leading cartoonists of the country participated. Elaborate presentation plans took on an official tinge when the City Council of Portland arranged for the presentation to be made on March 25 in council chambers as an interlude at their regular business session.

The award was made by Tom A. Burke, assistant director, Western Region Office. In addition to the plaque to Mr. Bimrose, the newspaper award for the paper running the cartoon was presented to Herbert Lundy, associate editor. A large audience witnessed the presentation ceremonies.

Commissioner William Bowes, head of the Department of Public Works, introduced the speakers on the program, including several officers and members of the Portland Traffic Safety Commission who were present. Finance Commissioner Ormond Bean, acting chairman of the Portland City Council, also congratulated Mr. Bimrose and the *Oregonian* for winning the cartoon awards and for the paper's sustained interest in safety and civic affairs.

Santa Clara Conference

Approximately 500 safety leaders and interested delegates attended the Santa Clara County Safety Conference held in the civic auditorium, San Jose, Calif., on Friday, March 26. The all-day program covered traffic, industrial safety, fleet safety, school and child, and home safety. In addition there was an interesting youth panel on teen-age driver education.

Earl F. Campbell, director, Western Region, National Safety Council, was the banquet speaker and his subject was "Safety—a Community Responsibility." Clinton W. Dreyer, managing director, Eastbay Chapter, was a featured speaker at the industrial session, on "Industrial Safety—a Coordinated Effort." Mr. Campbell also spoke at the opening session and

presented awards to winners in the council's inter-fleet contest.

Another feature was the presentation of the Truck Owners Association "Driver of the Year" award to David L. Ditto of the Lippolis Draying Company. The interesting, well planned program was sponsored by the Santa Clara County Chapter, National Safety Council, in cooperation with 20 civic and county organizations.

Central States Meet

A large attendance was on hand for the 1954 Central States Safety Congress, held at Hotel Chase, St. Louis, on April 27, 28 and 29. Three subjects of pertinent interest made up the general session programs, "The Unions and the Safety Program"; "Supervision, the Key to Accident Prevention;" and "Safety Indoctrination and Training of Employees."

Sessions were also held in traffic, fleet, industrial nursing, home, fire prevention, metal working and public safety education. The safety equipment exhibit also drew a large attendance.

Milwaukee's Big School

The first session of the 34th annual Milwaukee Foremen's Safety School was held on Thursday, March 25, with every indication that last year's record attendance of 11,626 persons would be broken at this year's series. Three evening meetings are scheduled for March 25, April 15 and May 6. As in the past the eight sectional programs precede the general assembly at each meeting.

The general session speakers are

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Good News for Telephone Users

**FEDERAL EXCISE TAX
ON LONG DISTANCE**

**REDUCED
FROM
25% TO 10%**

**FEDERAL EXCISE TAX
ON LOCAL SERVICE**

**REDUCED
FROM
15% TO 10%**

THE reductions in federal excise taxes, voted recently by Congress, mean substantial savings for telephone users. Your telephone bill is lowered by the entire difference between the old and the new taxes.

Instead of paying 25% on Long Distance calls, you now pay 10%. On Local telephone service, the tax is now 10% instead of 15%.

The entire amount of the saving in taxes comes off the bills of our customers. None of it is retained by the telephone companies.

The reductions went into effect on April 1 and apply to service billed to you on or after that date.

Now it costs you even less to keep in touch by telephone.

BELL TELEPHONE SYSTEM



THE SAFETY LIBRARY



Books, Pamphlets and Periodicals of Interest
to Safety Men

Compiled by Ruth Parks, Librarian, NSC

Books and Pamphlets

Flammable Liquids

Code for the Storage and Use of Highly Flammable Liquids. Published by Association of British Chemical Manufacturers, Cecil Chambers 86, Strand, London W. C. 2, England. 1954. 16p. 50c. (Safety Circular NR 97).

Mines

Experiments on Short-Delay Blasting in the Experimental Coal Mines. Published by U. S. Bureau of Mines. 1954. 6p. Free. Available from the Bureau, Publications Distribution Section, 4800 Forbes St., Pittsburgh 13, Pa. (Report of Investigations 5026).

Refrigeration

American Standard Safety Codes for Mechanical Refrigeration. Published by American Society of Refrigerating Engineers, 234 Fifth Avenue, New York 1, N. Y. 1953. 19p. \$1.00. (ASA-B9.1-1953, ASRE Standard 15-53.)

Training

Safety Subjects. Published by U. S. Bureau of Labor Standards. 1953 revised edition. Bulletin No. 67. 270p. 75c. For sale by the Superintendent of Documents, Washington 25, D. C.

Women in Industry

The Woman on the Job—Her Health and Safety. Published by National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill. 1954. 88p. \$2.50.

Magazine Articles

Chemicals

Toxicological Studies of p-Tertiary-Butyltoluene. By Charles H.

Hine and others. *A.M.A. Archives of Industrial Hygiene and Occupational Medicine.* March 1954, p. 227.

Toxicology of Hydrazine. By Stephen Krop. *A.M.A. Archives of Industrial Hygiene and Occupational Medicine.* March 1954, p. 199.

Vinyl Chloride. Published by Manufacturing Chemists Association, 1625 Eye St., N.W., Washington 6, D. C. 1954. 16p. 25c.

Color

Color for Safety. The Magazine of Standards. Feb. 1954, p. 52.

Fire Protection

Plant Fire Protection Pays in Huge Wood Products Mill. By John J. Lemon. *Fire Engineering.* March 1954, p. 217.

Housekeeping

Poor Plant Housekeeping Invites Accidents. By Myron L. Miller. *Plant Engineering.* March 1954, p. 36.

Noise

Cut Down Noise in Paper Mills. By Dr. W. Schweisheimer. *Pulp and Paper Magazine of Canada.* March 1954, p. 168.

Correction

In the list of 1953 First place winners of the National Safety Council's Industrial Contests, published in NATIONAL SAFETY NEWS for April, 1954—the following Aeronautical Industry winners were inadvertently omitted:

Group A

Douglas Aircraft Co., Santa Monica Div.

Group B

The Oliver Corp., Aviation Div., Battle Creek, Mich.

Industrial Noise and What A-C Is Doing About It. By W. F. Scholtz. *Plant Engineering.* March 1954, p. 96.

Printing and Publishing Industry

Safe Program Operation of Electronic Sealing Press for Bookbinding. Explained by Users and Manufacturers. Bookbinding and Book Production. March 1954, p. 43.

Radiation

Handling "Hot" Materials. Modern Materials Handling. April 1954, p. 98.

Radium in the Healing Arts and in Industry. By James G. Terrill, Jr., and others. *Public Health Reports.* March 1954, p. 255.

Repulsive but Impressive

This startling visual aid is being used to help explain injuries to employees in the Lancaster, Pa., plant of Armstrong Cork Company.

Recently Dr. Harvey L. Lehman, plant physician, purchased



this plastic model of a human skeleton for the plant dispensary. He has found that employees understand injuries better and are more likely to take care of them when he demonstrates with the skeleton. Here Dr. Lehman is explaining the bone structure of the hand.

Your Workers will be proud to wear Safety Shoes with **WINGUARD** Steel Toes



IN **19**
STYLES
A STEEL TOE
FOR EVERY
SAFETY
PURPOSE

Appearance, of course, isn't everything but you'll be amazed how it will help you to persuade your workers to protect their priceless toes with safety shoes.

While it is true we have 19 different styles of austempered steel toes available, WINGUARDS are by far the most popular for styling your safety shoe requirements.

Safety Box Toe Company

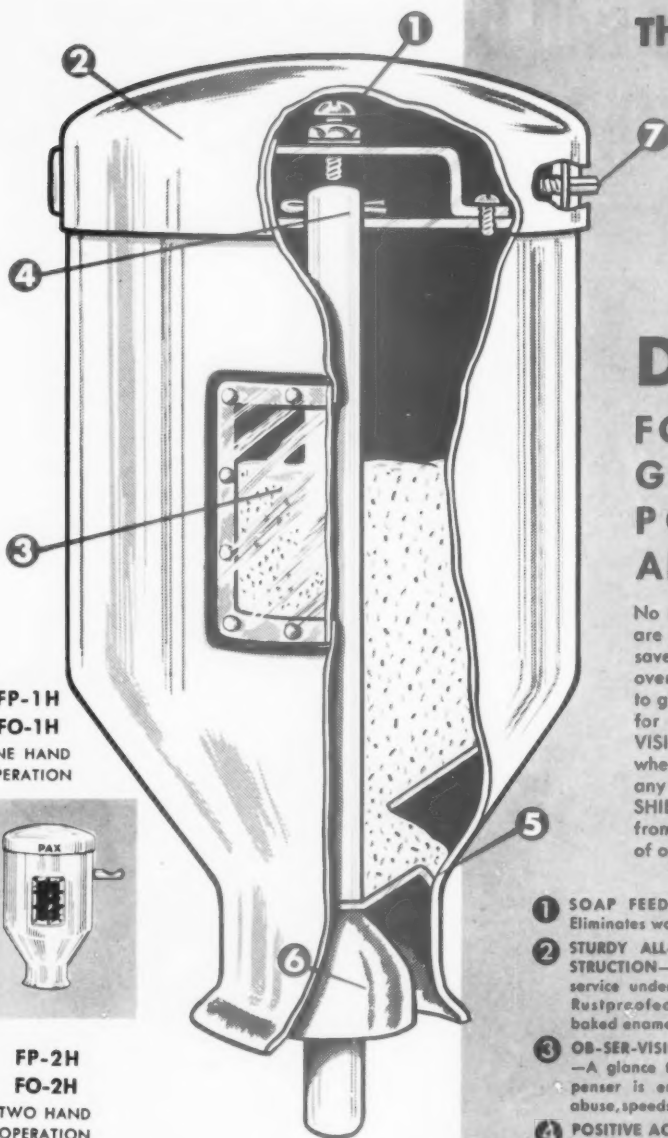
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FO-1H**
ONE HAND
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When you specify any PAX Product you get as an extra dividend the experience, ability and special know-how of our PAX Research and Testing Laboratory, acquired through more than a quarter-century of continuous research and development.

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for it is Your Assurance
of a Superior Product.



The dispenser that
pays for itself!

PAX Ob-Ser-Vision (SOAP SAVER)

DISPENSERS FOR ALL TYPES OF GRANULATED AND POWDERED SOAPS AND SKIN CLEANSERS

No matter what type of soap or skin cleanser you are using, PAX Ob-Ser-Vision Dispensers will soon save enough soap to pay for themselves many times over. The SOAP FEED CONTROL is easily adjustable to give the most satisfactory and economical setting for any type of soap. Prevents waste. OB-SER-VISION WINDOW saves filling time. Prevents abuse when dispenser is empty. POSITIVE ACTION keeps any type of soap flowing freely. NEW SPLASH SHIELD prevents water splashed from wet hands from entering and causing clogging. Never gets out of order.

- 1 SOAP FEED CONTROL—Eliminates waste.
- 2 STURDY ALL-METAL CONSTRUCTION—Gives years of service under severest use. Rustproofed. Chrome or baked enamel finish.
- 3 OB-SER-VISION WINDOW—A glance tells when dispenser is empty, prevents abuse, speeds re-fill checking.
- 4 POSITIVE ACTION—Plunger action against top cross-member assures free flow of any type soap.
- 5 POSITIVE CUT-OFF—Tight seating valve prevents waste from "bleed", sifting from vibration.
- 6 SPLASH SHIELD—Prevents clogging.
- 7 EASILY FILLED and LOCKED—Key prevents tampering. ONE or TWO HAND OPERATION in plant (FP) or office (FO) size.



PAX-LANO-SAV HEAVY DUTY is the most popular skin cleanser used in the industrial field. Its lively but gentle granules get really dirty hands clean in a hurry. PAX-LANO-SAV Emollient blended into every granule gives extra protection.



PAX-LANO-SAV HEAVY DUTY Granulated Skin Cleanser has been awarded the Seal of Acceptance of the Committee on Cosmetics of the American Medical Association.

Distributed Nationally Through PAX Warehouses and Jobber Stocks. Write for the Name of Your Nearest Distributor.

G. H. PACKWOOD MFG. COMPANY

Manufacturing Chemists

1534 TOWER GROVE AVE. • ST. LOUIS 10, MO.

PERSONALS



Arthur Naquin Honored For Civic Activities

ARTHUR J. NAQUIN, safety counselor for New Orleans Public Service, Inc., has been awarded the Louisiana Engineering Society Civic Activities Medal—the Andrew M. Lockett Award. Mr.



Arthur J. Naquin

Naquin was nominated for the honor by the New Orleans Chapter of the American Society of Safety Engineers and the presentation was made at the annual meeting of the Louisiana Engineering Society January 7.

The medal is awarded by the society for distinguished service by an engineer in the interest of the public without compensation.

Mr. Naquin was born in Denison, Tex., March 31, 1900. He was graduated from Tulane University College of Engineering with the degree of B.S. in Mechanical-Electrical Engineering in 1924. After graduation he was

student engineer in the test department of General Electric Company at Schenectady and Erie Works. In 1926 he joined New Orleans Public Service as equipment engineer in the railway department. In 1929 he was appointed transportation engineer and the following year became superintendent of the schedule division. Since 1941 he has been safety counselor.

Mr. Naquin was elected to membership in the American Society of Safety Engineers in 1942 and was a leader in organizing the New Orleans Chapter. He was the chapter's first chairman, serving 1949-51. He also served as the National vice-president for the Southern Region and for several years has been on the national executive committee.

The Delta Safety Society, the Louisiana Safety Association, and the Metropolitan New Orleans Safety Council are other safety groups in whose organization he has participated and which he has since served in various official capacities.

From 1941-45 Mr. Naquin served as an instructor in the ESMWT courses conducted under the sponsorship of Tulane University. He taught six basic courses and three advanced courses in industrial safety engineering. A large percentage of men now engaged in safety work in the area were students in his classes. Since the war Mr. Naquin has continued to serve as guest lecturer to engineering students at Tulane. Many of his former students and many new men in the safety field come to him for advice, which he is never too busy to give. During World War II he served as special agent for the Division of Labor Standards, U. S. Department of Labor. During the same period he also served as assistant state chairman of the National Committee for the Conservation of Manpower in the War Industries.

Other organizations in which Mr. Naquin has served actively include: American Public Works Association, Institute of Traffic

Engineers, Louisiana Engineering Society, Society of Tulane Engineers, American Transit Association, Edison Electric Institute, Southeastern Electric Exchange, Chamber of Commerce, Young Men's Business Club, Southern Safety Conference, and the Governor's Highway Safety Committee. Through these organizations he has also given able service to the cause of safety.

Harvey Named Assistant Safety Director at Ford

Appointment of RAYMOND D. HARVEY as assistant safety director of Ford Motor Company has been announced by Robert T. Ross, manager of employee services.



Raymond D. Harvey

Mr. Harvey, formerly director of safety and security for Murray Corp. of America, will assist Ford safety director William S. Smith in administering company-wide safety activities.

A native of Itasca, Mich., Mr. Harvey attended Michigan State Normal College and Wayne University. He worked for Mr. Smith in the Ford safety department for nine years, starting in 1932, before leaving to become safety director for Murray Corporation in 1941. He subsequently was pro-

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FOR DISTINGUISHED SERVICE



THREE TYPES of awards for outstanding performance in industrial accident prevention are provided for in the "Plan for Recognizing Good Industrial Safety Records" adopted in January 1952, by the Industrial Conference and the Board of Directors of the National Safety Council.

The three types of awards are:

1. **THE AWARD OF HONOR**, the highest award, replaces the Distinguished Service to Safety Award. It goes to industrial establishments whose experience meets rigorous statistical standards, even though it may not be injury-free. It also goes to those which complete 3,000,000 manhours without a disabling injury.

2. **THE AWARD OF MERIT** has similar but less exacting requirements. The standards for non-perfect records are somewhat lower, and the minimum number of injury-free manhours needed to qualify is 1,000,000.

3. **THE CERTIFICATE OF COMMENDATION** is given only for no-injury records covering a period of one or more entire calendar

years and involving exposure of 200,000 to 1,000,000 manhours.

For qualifying calendar-year experience, all three types of awards are made automatically on the basis of annual reports submitted to the Council by members. The Award of Honor and the Award of Merit may also be made on special application in two types of cases.

1. Where a qualifying total of injury-free manhours is accumulated in some period other than a calendar year.

2. Where a current period of two or more years is to be used in evaluating injury rate improvement.

Publication of awards under this plan succeeds "The Honor Roll" department formerly published in the **NATIONAL SAFETY NEWS**. The foregoing is but a synopsis of the award plan. For a more complete and precise statement of eligibility requirements, members should refer to the plan itself. Details may be obtained by writing to Statistics Division, National Safety Council.

AWARDS OF HONOR

Aluminum Company of America, East St. Louis Works.
—Refining Division, Mobile, Ala.
—Smelting Division, Vancouver, Wash.
Bethlehem Steel Co., Bethlehem (Pa.) Plant.
—Bethlehem Quarry.
—Bethlehem Supply Co., Tulsa Plant.
—Fabricated Steel Construction, Buffalo Works.
—Fabricated Steel Construction, Erection Dept., Pittsburgh.
—Fabricated Steel Construction, South San Francisco Works.
—Fabricated Steel Construction, Steelton Works.

—Johnstown Plant.
—Lebanon Plant.
—Los Angeles Plant.
—Seattle Plant.
—Shipbuilding Division, Quincy Yard.
—South San Francisco Plant.
—Williamsport Plant.
Bowater's Newfoundland Pulp & Paper Mills, Ltd., Corner Brook, Newfoundland (Entire company).
Buckeye Cotton Oil Co., Memphis, Tenn., Greenwood (Miss.) Plant.
—Selma, Ala. Plant.
Carolina Aluminum Co., Badin (N.C.) Plant.
J. I. Case Co., Bettendorf, (Iowa) Works.

Caterpillar Tractor Co., East Peoria (Ill.) Plant.

—Joliet (Ill.) Plant.

Celanese Corporation of America, Amcelle Plant, Cumberland, Md.

Central Power and Light Co., Corpus Christi, Texas (Entire company).

Champion Paper & Fibre Co., Carolina Division, Canton, N. C.

Chicago, Burlington & Quincy Railroad Co., Alliance (Neb.) Division.

Clark Equipment Co., Buchanan, Mich. (Entire company).

Cleveland Electric Illumination Co., Cleveland, Ohio (Entire company).

Clinton Foods, Inc., Clinton, Iowa, Corn Processing Division.

James B. Clow & Sons, Newcomers-town (Ohio) Plant.

Cohart Refractories Co., Louisville, Ky. (Entire company).

Coosa River Newsprint Co., Coosa Pines, Ala. (Entire company).

Dierks Lumber and Coal Co., De Queen, Ark., Clebit Division Logging.
Douglas Aircraft Co., Inc., Tulsa, (Okla.) Division.

The Dow Chemical Co., Inc., Midland (Mich.) Division.

Edgar Brothers Co., McIntyre, Ga. (Entire company).

Electro Metallurgical Co., Niagara Falls (N. Y.) Plant.

Firestone Tire and Rubber Co., Akron (Ohio) Plant No. 1.

—All United States Plants.

—Bombay, India, Plant.

Firth Sterling, Inc., McKeesport, Pa. (Entire company).

General Electric Company, Cleveland Equipment Works.

Goodman Manufacturing Co., Chicago, Ill., Halsted St. Division—Main Plant.

The B. F. Goodrich Co., Akron, Ohio (Entire company).

—Akron Plant.

Great Northern Railway Co., St. Paul, Minn., Butte Division.

A. P. Green Fire Brick Co., Mexico, Mo. (Entire company).

Gulf States Paper Corp., Tuscaloosa, Ala. (Entire company).

Harper-Wyman Co., Chicago, Ill. (Entire company).

Edward Hines Lumber Co., Chicago (Ill.) Plant.

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SLINGS TO LIFT ANYTHING IN THE WORLD

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Lift King
Braided King
Economy King



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Committee to Study Standards for Pallets

Asserting that standards for handling material are necessary to U. S. economy and defense, representatives of the armed forces, government departments and industry voted recently to organize a committee to study and develop American Standards for pallets. The meeting was held at the offices of the American Standards Association.

Forty leaders of industry and government proposed that an ASA project be initiated to undertake the standardization of nomenclature, sizes, materials and components of pallets, including samplings, inspection and test procedures.

Chester J. Heinrich, Naval Supply Research and Development Facility, Bayonne, New Jersey, represented the Navy Department. The National Defense Transportation Association was represented

by Leo J. Coughlin, Elizabeth, N. J.; the U. S. Department of Commerce by Charles H. Pearce; the Department of Defense, Charles F. Fogarty; the National Security Industrial Association, H. C. Christensen.

Other groups represented included materials handling, trucking, lumber, railroads, insurance, packaging and shipping.

Many Heart Disease Victims Can Resume Activity

Heart disease victims who recover from an initial attack have a good chance of living for many years, according to Metropolitan Life Insurance Company statisticians. This is indicated in a study of survivorship among a group of white men insured as standard risks who subsequently became disabled by heart disease, but later recovered sufficiently to be considered able to return to work.

More than 70 per cent of the group, regardless of the type of heart ailment causing disability, were still alive after five years. Of those who had been disabled solely by arteriosclerotic heart disease, about 85 per cent were living at the end of five years, and 70 per cent at the end of 10 years.

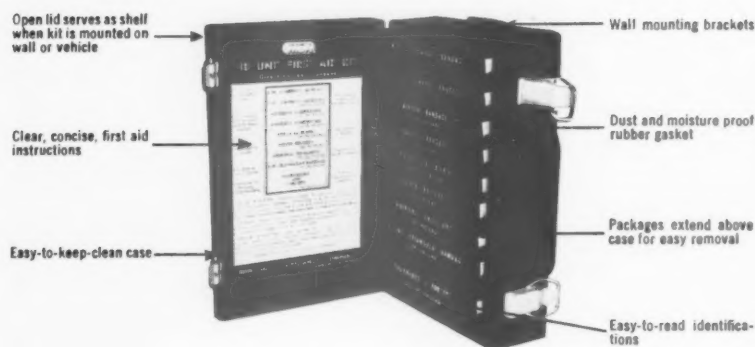
Survivorship was somewhat less favorable for arteriosclerotic cases with a coronary occlusion history, although even among them more than 50 per cent survived for 10 years.

The study indicates that resumption of activity by persons with heart disease is often practicable, according to the statisticians. As may be expected, the survivorship record of these men was below the average for those without heart impairments.

"A prime obstacle to the rehabilitation of cardiacs is their fear that work will be hazardous," it was observed. "Under good medical supervision a large proportion of patients with heart disease can resume work and activity suited to their physical capacity, and by so doing benefit both physically and psychologically."

Nothing man has created is outside his capacity to change.

THE NEW M-S-A FIRST AID KIT IS DIFFERENT . . . BECAUSE OF IMPORTANT LITTLE THINGS LIKE THIS



Here's a First Aid Kit that gives you the important *extras* in quality and performance. A few of the important case design and construction features which serve your needs better are illustrated above. And that's only part of the New M.S.A. First Aid Kit story. Quality control, and improved first aid materials are other important improvements that add up to the big difference!



So you can be sure of freshness, purity and sterility, every Unit "D" package is stamped with a Quality Control number. This number identifies the "pedigree" clear back through our every operation.



Our modernization program extends to first aid materials. Color keying of labels for antiseptics, burn treatments, and others assure quick identification. Swabs have gauze tips which are less absorbent, assure maximum utilization of antiseptic.

And there's more, lots more. Get the facts today. Write for our bulletin.



MINE SAFETY APPLIANCES COMPANY
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in the United States and Canada

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BUREAU OF MINES
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COMPACT
LIGHT WEIGHT
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ECONOMICAL
SINGLE CARTRIDGE

NAME: **CHEMOCART C-256**
WEIGHT: 7.6 OZS.
ARRIVED: NOW
HOSPITAL: U.S. BUREAU OF MINES
APPROVAL #2309

PROUD PARENT: **PULMOSAN**
SAFETY EQUIPMENT CORP.



CHEMOCART C-256

PAT. PEND.

TRADE MARK

PERMISSIBLE NONEMERGENCY
GAS RESPIRATOR
FOR
ORGANIC VAPORS

APPROVAL



NO. 2309

ISSUED TO THE
PULMOSAN SAFETY EQUIPMENT CORP.
Brooklyn, New York, U. S. A.

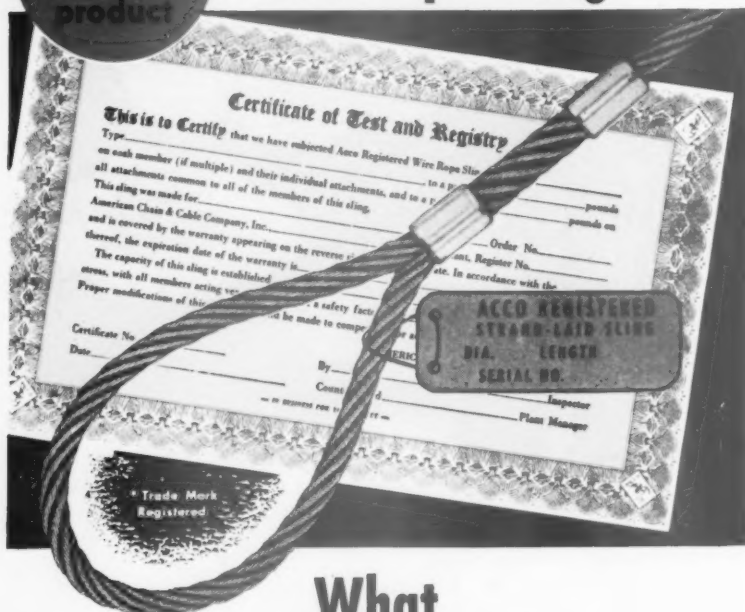
Approved for respiratory protection in atmospheres not immediately dangerous to life or containing not more than one tenth (0.1) percent organic vapors by volume.
The approved assembly consists of BM 2309 cartridge and BM 2309 facepiece

Pulmosan

EVERYTHING FOR INDUSTRIAL SAFETY



ACCO Registered* Wire Rope Slings



What ACCO Registered Means

• Primarily it means greater safety for your men and machines when loads are carried in the air in your shop. It means insurance against dropping a load which could tie up production.

But that's only part of the story. The name ACCO Registered on the slings you use means greater efficiency because of better design of endings and attachments. It means lower overall sling costs because every part of every ACCO Registered Wire Rope Sling has the same strength as the catalog breaking strength of the rope itself. ACCO even magnafluxes each hook to make doubly sure it will serve you well.

And it means that the sling has been proof-tested at the factory to twice its rated capacity. You can be sure that every ACCO Registered Wire Rope Sling is the safest, strongest and lowest cost lifting tool you have ever used.

Best of all, you can get them when you need them from a nearby stock. Contact your ACCO Registered distributor today for full information and prices. Or, write our Wilkes-Barre, Pa., office.

- 1 The best material
- 2 Unit safety factor (on bodies, rings, links, safety shackles, hooks)
- 3 Proof test of complete sling to twice rated capacity
- 4 Actual field service test of each model
- 5 Metal identification tag on each sling
- 6 Signed Registry Certificate with each sling



Wire Rope Sling Department AMERICAN CHAIN & CABLE

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COMING EVENTS



In the Field of Safety

May 4-6, Washington, D.C.

The President's Conference on Occupational Safety. William L. Connolly, director, Bureau of Labor Standards, United States Department of Labor, Washington 25, D. C., or Chas. F. Alexander, manager, Industrial Department, National Safety Council, 425 North Michigan Ave., Chicago 11.

May 4-6, Raleigh, N. C.

Twenty-fourth Annual North Carolina Statewide Industrial Safety Conference (Sir Walter Hotel). H. S. Baucom, safety director, North Carolina Industrial Commission, Raleigh.

May 5, Bethlehem, Pa.

Twenty-Seventh Annual Eastern Pennsylvania Safety Conference (Hotel Bethlehem). H. A. Seward, secretary-treasurer, Lehigh Valley Safety Council, 602 E. 3rd St., Bethlehem, Pa.

May 6-7, Baltimore, Md.

Annual Governor's Safety-Health Conference and Exhibit (Lord Baltimore Hotel). Joseph A. Haller, director of safety, State Industrial Accident Commission, Equitable Bldg., Baltimore 2, Md.

May 12-14, Chicago

Greater Chicago Safety Conference and Exposition (Hotel Sherman). Joseph F. Stech, secretary-treasurer, Greater Chicago Safety Council, Suite 806, 10 North Clark St., Chicago 2.

May 13, Sheboygan, Wis.

Fox River Valley and Lakeshore Regional Conference, Wisconsin Council of Safety.

May 17-21, Washington, D.C.

Fifty-Eighth Annual Meeting, National Fire Protection Association (Hotel Statler). Percy Bugbee, general manager, NFPA, 60 Batterymarch St., Boston 10, Mass.

May 18, Janesville, Wis.

Rock River Valley Regional Conference, Wisconsin Council of Safety.

May 20, Kenosha, Wis.

Southeast Lakeshore Regional Conference, Wisconsin Council of Safety.

May 20-21, Seattle, Wash.

Forest Products Safety Conference (New Washington Hotel). Robert M. Gilmore, c/o Rayonier, Incorporated, P. O. Box 539, Hoquiam, Wash.

May 20-22, Norfolk, Va.

Twentieth Annual Virginia Statewide Safety Conference (Monticello Hotel). William M. Myers, executive secretary, Room 302, 1103 East Main St., Richmond 19, Va.

May 27-28, Toronto, Ont.

Annual Meeting, Mines Accident Prevention Assn. (King Edward Hotel). S. W. McIntosh, secretary, 320 Bay St., Toronto 1, Ont.

June 1-2, Groton, Conn.

Ninth Annual Connecticut Industrial Safety Conference (Griswold Hotel). John W. Kent, manager, The Connecticut Safety Society, 26 Chaucer Ct., Woodmont, Conn.

June 8, Wausau, Wis.

Wisconsin River Valley Regional Conference, Wisconsin Council of Safety.

June 9, Eau Claire, Wis.

Northwest Regional Conference, Wisconsin Council of Safety.

Sept. 14-16, Cleveland, Ohio

Sixteenth Annual Ohio State Safety Conference and Exhibit (Hotel Carter). Carl L. Smith, executive secretary, 2073 East Ninth St., Cleveland 15, Ohio.

Sept. 16-17, York Harbor, Me.

Twenty-Seventh Annual Maine State Safety Conference (Marshall House). A. F. Minchin, secretary, Maine State Safety Conference, Department of Labor and Industry, Augusta, Maine.

Oct. 18-22, Chicago

42nd National Safety Congress and Exposition (Conrad Hilton Hotel). R. L. Forney, general secretary, National Safety Council, 425 N. Michigan Ave., Chicago 11.

The President's Medal

Awards made by the National Safety Council for successful application of artificial respiration

HOWARD KINNAMON, storekeeper, The Chesapeake and Potomac Telephone Company of Baltimore City, Easton, Md.—gas asphyxiation.

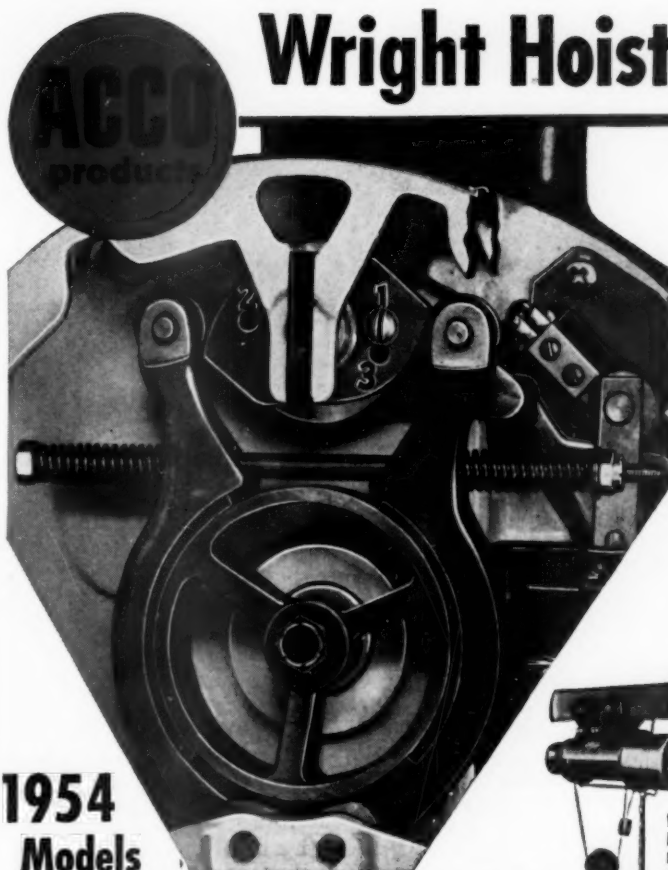
VAN DEMAR VANORMAN, farmer and factory laborer, Canadian Sugar Factories, Taber, Alberta, Canada—drowning.

LEONARD JOSEPH DUSOME, horticulturist foreman, Cedarvale Tree Experts, Midland, Ontario, Canada—electric shock.

PAUL A. PETERSON, lineman, Consumers Public Power District, Kearney, Neb.—electric shock.

National Safety News, May, 1954

Wright Hoists



1954
Models

SMASH MAINTENANCE COSTS!

...Nothing to adjust but the cam!

• The brake assembly pictured above for the WRIGHT FRAME 1 SPEEDWAY HOIST is your assurance of maximum hoist service...minimum down-time. Adjustment of this cam-actuated brake to compensate for brake lining wear is literally "as simple as ABC." *There is no guess work about it.*

When the load hook starts to drift, remove the screw shown at position No. 1 (see picture), swing the cam around so that position No. 2 is in line, and replace the screw that secures the cam to the solenoid lever arm. For the final one-third of brake lining wear, set the cam at position No. 3. This repositioning of the cam is the ONLY adjustment to be made by the users of WRIGHT Hoists. The

brake springs and solenoid are factory-set...NEVER need adjustment for brake lining wear.

Long life is a built-in characteristic of these hoists. They are built and guaranteed for service to the limit of the duty cycle of 30 minute, totally enclosed NEMA specification motors. These 1954 models provide full accessibility of parts for lowest maintenance costs. To get at the brake and controller, you remove two screws which hold the end cover. To get at the limit switch, transformer, and solenoid coil, you remove three screws and the side cover comes off. With this full accessibility you can make a brake adjustment or replace electrical parts in a matter of minutes.

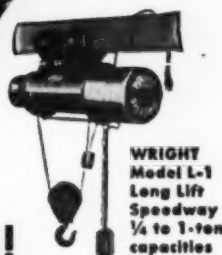
Remember, PRICE + MAINTENANCE = COST. For full details on the low-cost WRIGHT Frame 1 Hoists see your WRIGHT distributor or write our York, Pa., office for literature.

ACCO

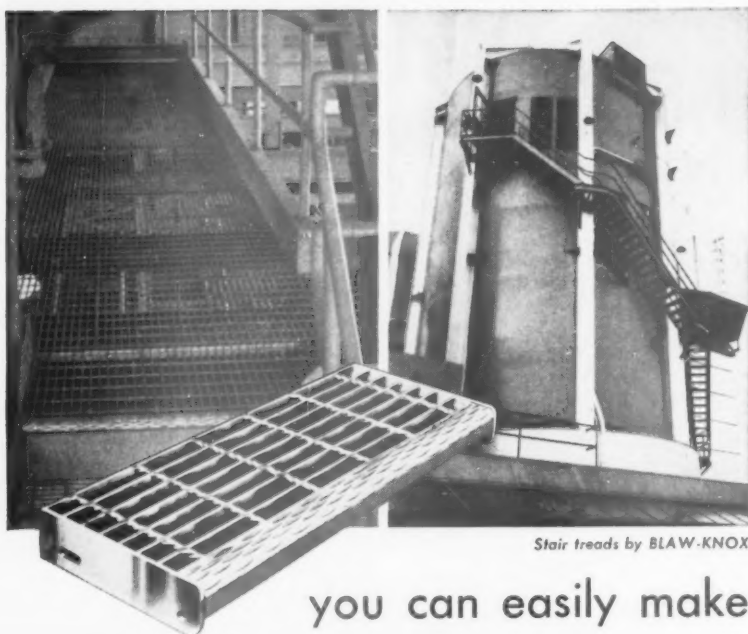


**Wright Hoist Division
AMERICAN CHAIN & CABLE**

York, Pa., Chicago, Denver, Detroit, Los Angeles, New York, Philadelphia, Pittsburgh, San Francisco, Bridgeport, Conn.



WRIGHT
Model L-1
Long Lift
Speedway
1/4 to 1-ton
capacities



Stair treads by BLAW-KNOX

you can easily make every step a safe step

Indoor or outdoor, you can rely on Blaw-Knox Stair Treads to provide the safety you want in your plant.

Designed for tremendous strength against impact, these stair treads are made with twisted cross bars and rolled diamond checkered plate nosing—as illustrated.

But, when desired, you can get treads with a twisted cross bar nosing or an abrasive nosing. And for specially slippery conditions we can supply you with serrated cross bar treads.

Just tell us what your application is and we'll offer our recommendations as to the best type of tread for your job.

Only Blaw-Knox Electroforged[®] Steel Grating and Stair Treads —have these five exclusive features:



1. rigid one-piece construction—easy to install
2. all surfaces accessible—easy to paint
3. no sharp corners to clog—self-cleaning
4. maximum open area—for light and ventilation
5. non-slip twisted crossbar—safe footing

*A short note will bring you a copy of new Bulletin No. 2365-R
—a dimensional sketch will bring you a quotation.*

BLAW-KNOX

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GRATING DEPARTMENT**

GRATING APPLICATIONS: floors • platforms • walkways • catwalks • stair treads • fan guards • shelving • and many other uses, both outdoors and indoors, for versatile steel grating.

Plutonium Hazard Less Serious, Report Shows

You can swallow more radioactive plutonium without physical damage than scientists used to think, according to recent tests at the Hanford Plutonium Plant, operated by the General Electric Company for the Atomic Energy Commission.

Hanford scientists discovered this by feeding plutonium in dilute solutions to 200 rats. It turned out that one-fortieth less plutonium from a given dose than previously calculated was absorbed into their intestinal tracts.

The scientists also found they could remove some of the plutonium even after the rats had received a dose. However, agents used to remove the radioactive material were ineffective if administered as late as 30 days after the plutonium was absorbed.

Effect on Skin

In other experiments it was discovered that almost no plutonium applied to the skin of rats penetrates unless it is in a solution "so strong it destroys the outer skin layer."

In their decontamination experiments researchers found that the best agents for removing contamination are those that also remove part of the outside layer of skin. Still to be learned is whether absorption through affected skin areas is increased in future contacts with contamination.

The tests were part of a continuing health and safety program carried on at the Hanford plant, even though there never has been a serious injury caused by radioactive materials there. Stringent safety regulations and elaborate protective equipment have effectively protected thousands of workers. These include some 8,700 persons employed by G.E., 400 by AEC, and several thousand construction workers.

Chief danger of plutonium produced by G.E. for the AEC is that, like radium, it destroys the blood-making organisms of the body if it enters the body in appreciable amounts.

Workers at Hanford daily work with the equivalent in radiation of tons of radium.



More Efficient,
Cheerful and Safer
Working Conditions with...
Pittsburgh
COLOR DYNAMICS®

Functional use of
colors lessens eye fatigue,
improves productivity,
boosts morale and
reduces accident hazards
in new \$3,000,000
Warner & Swasey plant.

COLOR DYNAMICS throughout the entire new Warner & Swasey plant in New Philadelphia, Ohio, gives workers increased visibility, greater safety and a psychological incentive for stepping up their activity—all of which result in better and greater production.

● An excellent example of the plant environment which Pittsburgh COLOR DYNAMICS provides is the new \$3,000,000 plant of The Warner & Swasey Company recently opened in New Philadelphia, Ohio.

● In this new plant Warner & Swasey manufactures parts for turret lathes, automatic screw and tapping machines, textile machinery and grading equipment. The entire structure was painted according to COLOR DYNAMICS.

● The reasons for the choice of COLOR DYNAMICS are best expressed by Walter K. Bailey, vice-president in charge of manufacturing:

● "We chose to use color functionally in order to create an environment that would be pleasing, cheerful and, at the

same time, improve the productivity of our operators. We selected colors that would increase visibility without causing eye fatigue.

● "We also painted recreation and rest areas in colors that would provide a welcome change of pace and return the workers to their jobs feeling alert and refreshed.

● "Above all, we wanted to create a work place of which the entire community could be proud. How well we succeeded is best shown by the enthusiastic comments when we held 'open house' at the time of our opening. This was further confirmed by the flood of applications from men who wanted to work in these surroundings. From every standpoint, we believe COLOR DYNAMICS is an investment that will pay off for years to come."

FREE—Color Engineering Study of Your Plant!

● Why not test the practical value of COLOR DYNAMICS in your plant—on a machine or two or in a whole department? Send for our free book which explains how you can use this modern painting system simply and easily.

● Better still, call your nearest Pittsburgh Plate Glass Company branch and ask to have a representative give you a detailed color engineering study of your plant, or any part of it, without cost or obligation. Or mail coupon at right.



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PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS

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your booklet, "Color Dynamics."
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Conf. 1952 Pittsburgh Plate Glass Co., Pittsburgh, Pa.

Stonehouse

SIGNS

FOR INDUSTRIAL ACCIDENT PREVENTION



THE safe worker really looks and acts it. He comes to the job with a feeling of security—and the standard of his work shows it.

The promotion of safety by Industry is a great accomplishment. It pays not only in safeguarding life and limb, but in higher morale, improved skills, better production.

STONEHOUSE SIGNS

Workers respond to safe conditions when guided by proper warnings and instructions. Keep telling them—with Stonehouse Signs that inform them of hazards and dangers. This is true accident prevention.

Write for our complete Catalog—
64 pages, in full color. It's free.

Stonehouse

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"Signs Since 1863"



ACCIDENT PREVENTION • steel SIGNS IN STANDARD COLORS AND DESIGNS

Age of Seeing

—From page 21

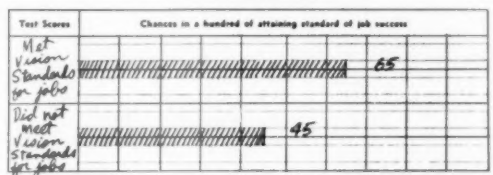
Only one or two answers to each of the questions can be given here. They are gathered from the many investigations and studies which have been made.

In the Editor's Note introducing his report covering *Management Methods*' investigations on "Testing Employee Vision" he states, "Several months ago *Management Methods* began to research case history evidence showing the relationship between employee productivity and employee vision. We originally intended to report the need for an eye test as a screening tool in hiring workers for both the plant and the office. As our study progressed it became increasingly evident that the subject had much broader implications.

"Consider these facts:

1. 40 per cent of all workers lack the proper vision for the jobs they are doing.
2. 66 per cent of all workers rated below average in efficiency by their supervisors have inadequate vision.

Expectancy Chart



1. Job title: *14 groups including laborers, painters, electricians, electroplaters, sheet metal workers, welders, etc.*
2. Works or plant: *U.S. Naval Ordnance Plant, Indianapolis*

4. Measure of job success: ☒ Production data, ☐ Personnel data, ☐ Judgments, ☐ Work sample

5. Standard of job success: *Freedom from accidents over 2 years period*

6. Test: *Ortho Rater Visual Performance Tests*

7. Employee sample: N = *499* Present employee ☒ Follow up ☐

- Those eliminated, if any

- Other data on sample

- Mean test score: variability

- Probabilities of differences due to chance:

- The relationship between test scores and the job success measure is such that it could have occurred thru chance alone about *6* times in *100,000* times

- Date of study: *6-28*

- Other data:

Figure 5. Relative frequency with which each of the nine visual performance tests showed a positive relationship with accident experience.

RELATION OF ORTHO-RATER VISUAL PERFORMANCE TESTS TO SAFETY AT US NAVAL ORDNANCE PLANT AT INDIANAPOLIS, INDIANA

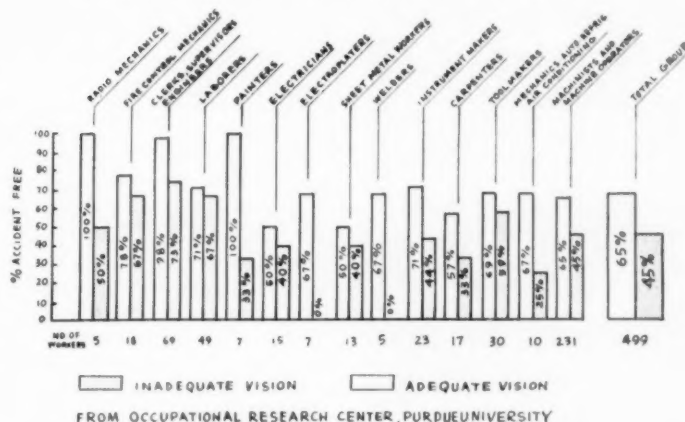


Figure 4. Those with adequate vision had consistently better safety records according to tests conducted at U. S. Naval Ordnance Plant, Indianapolis.

3. And most important, 90 per cent of all workers with below standard eyes can be brought up to par by their employers through the expenditure of a few dollars per employee."

In referring to Figure 1 we may well ask the question "Is vision related to the productiveness and general well being of this young

woman seaming full fashion hosiery?" To illustrate how relationships are established and standards set, we have taken the employee scores on one of the 12 tests from the complete battery of the Ortho-Rater—the worse eye, near point acuity. The test slide is illustrated in Figure 2.

Each of the 51 hosiery seamers in one plant looked into the instrument and with the right eye saw —To page 121

VISUAL PERFORMANCE PROFILE

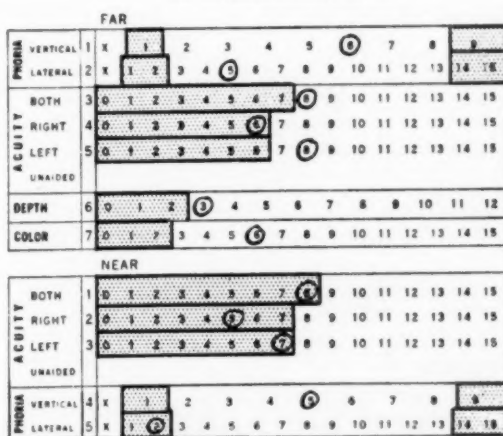


Figure 6. Circled numbers show visual performance of an individual on 12 visual skills which have shown consistent relationship to productiveness and accidents. Scores falling in shaded area indicate that employee does not meet standard.

172 ELECTRIC UTILITIES USE CHARCO'S FLEX-SAF LINEMEN'S GLOVES



**Because they
find them:**

1 Safer . . . they are the result of extensive laboratory research, continuous control for uniformly high quality, careful processing, rigid inspection and testing exceeding ASTM requirements.

2 More comfortable . . . proven hand design, with curved fingers, greater flexibility, reducing hand fatigue.

3 Longer life . . . superior formulation, proven by field experience.

Your linemen, too, deserve the safest. Give them CHARCO FLEX-SAF RUBBER GLOVES.



Write today for complete catalog of safety products

CHARLESTON RUBBER COMPANY

Stark Industrial Park
Charleston, South Carolina

Other products manufactured
exclusively by CHARCO include:

CHARCO FLEX-FIT PROTECTIVE SLEEVES BULLDOG COMBINATION CLAMPS

CARELESSNESS

JAMES sashayed up to the boss and told him the whole place stunk and that things were all strictly snafu. He was just *careless*—he didn't say what the more discriminating type of employees are saying this year.

Ignatz crossed the street against the traffic light and was parlayed by a 10-ton truck. He was *careless*—he didn't think those lights were for pedestrians too.

Orly thought he was a good salesman and tried to talk his wife into being sorry for the girl who lost her lipstick in the back seat of his car. He was just *careless*—he should have known she wasn't the sorry type.

Harold was a steady soul and reached in between the moving parts of the machine to flick a bit of oil on the gazoo. He was *careless*—he should have known he had one too many martoonies the night before. Now he'll have to hoist them with his other arm.

Ersatz, oldest man in the plant, backed into the rotating bar-stock extending from his automatic screw machine. He was *careless*—but I never saw any stripper de-pantsed so fast before.

Ainslee thought he could stop his souped-up convertible "joy wagon" at the drop of a hot flash. But, he was *careless*. He was sure a sorry looking Roman candle type character when he splattered against that double bottom gas hauler, racing it to the trip-light intersection.

Suzi, fresh from high school, was put to work on a drill press and had half her hair ripped out when it caught on the spindle. She was *careless*. Anybody should have known that might happen.

Farquardt had operated a rip saw for years. But he was *careless*. Now he's the only guy in the place with two navels. When the saw hit the knot in that 2" x 8", it didn't stop for nothin' or nobody.

Careless . . . shmarehouseless . . . what do you think?

ROBERT D. GIDEL, Senior Engineer,
Industrial Department, National Safety Council

Safety Handbook Uses Cartoon Strip Style

The comic strip cartoon has been pressed into accident prevention service in a new 36-page safety handbook by Crucible Steel Company of America. Four-color cartoons dramatize the words of the company doctor, safety director, and other company officials as they stress over-all safety.

The handbook is divided into two sections. The first explains the reasoning behind safety practices. Here the vice-president in charge of operations states the three basic safety policies of the company: (1) Safety comes first in our company. Not one pound of steel should be produced or shipped at the expense of a disabled employee. (2) Safety is not only the respon-

sibility of the safety department, but is the responsibility of everyone in the company. (3) We have no place in our company for supervisors who have no time for safety.

The second section is an ABC primer of illustrated safety rules and suggestions. These deal with such subjects as the employee's attitude toward safety, cleanliness, reporting of injuries, danger signals, first aid, slips and falls, and protective equipment.

The new handbook is being sent to the homes of Crucible's 16,000 employees. It will also be used to indoctrinate new employees with the company's safety policies. The book was written by Crucible's Safety Section, and the cartoons were prepared by company artists.

Obituary

MRS. LEW R. PALMER

MRS. VESTA S. PALMER, widow of Lew R. Palmer, one of the founders of the National Safety Council and its president, 1916-17, died in Philadelphia April 8. Surviving are a daughter, Mrs. Thomas D. Philipps of Philadelphia; two sisters, Mrs. William T. Church of Chicago, and Mrs. Charles B. Russell of Savannah, Ga., and a brother, Frank O. Shoemaker, of Whittier, Calif.

Mr. Palmer attended the first Safety Congress in Milwaukee in 1912 with her husband and at the Banquet of the Fortieth Congress she was presented with a commemorative certificate and a bouquet of roses.

G. A. KUECHENMEISTER

GUSTAV A. KUECHENMEISTER, formerly personnel manager for Dominion Forge and Stamping Company, Walkerville, Ontario, died March 23. He was 69 years old.

Since his retirement in 1950 he had been living in Detroit. He joined the company in 1915 when accident prevention work was getting under way and made important contributions to the program. In addition to assisting other companies in establishing safety organizations. Eye protection was one of his absorbing interests.

Mr. Kuechenmeister was for many years a member of the executive committee of the Automotive and Machine Shop Section, NSC, and its general chairman 1925-26. He also held several offices in the Power Press Section. He was one of the organizers of the Industrial Accident Prevention Associations of Ontario and a charter member of the Drop Forging Association Safety Committee.

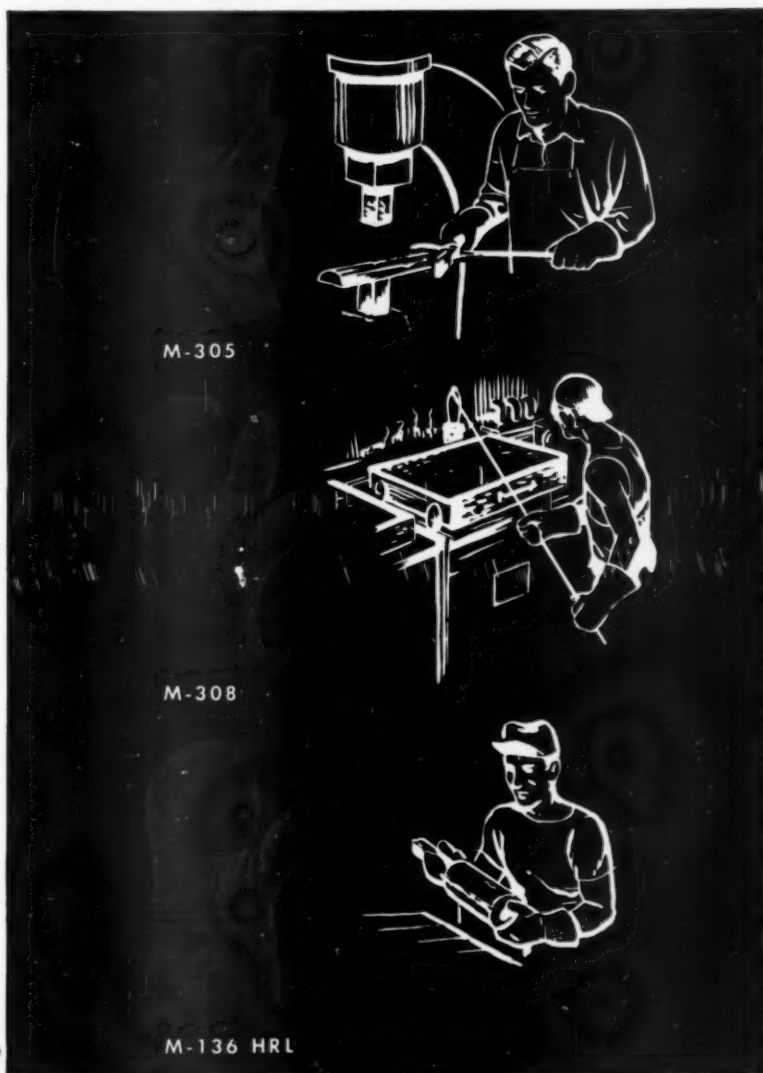
The medical department is not a thing apart. For everyone in the environment, from president to untitled workers, all paths lead to its door, and the door swings both in and out.

—*Industrial Medicine and Surgery*

NEW RED JOMAC[®] FLAMEPROOF MITTS

These new red Jomac Mitts can easily be identified by supervisory personnel to insure the use of the correct mitt and thereby prevent injuries. Distinctive color also provides positive identification and speeds issuance from the stockroom.

WRITE FOR LITERATURE ON THIS NEW LINE OF RED JOMAC FLAMEPROOF MITTS—SAMPLES AND PRICES UPON REQUEST



C. WALKER JONES CO. • PHILADELPHIA 38, PA.

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INDUSTRIAL HEALTH



*Abstracts of current literature
on Industrial Hygiene, Medicine, and Nursing*

BY F. A. VAN ATTA
Industrial Department, NSC

The Executive's Health

Executive Health Programs by George M. Saunders. AMA Archives of Industrial Hygiene and Occupational Medicine 9:133-141 (February, 1954).

MANY LARGE COMPANIES have come to realize in the past 20 to 30 years that their executives are among their most valuable assets and executive health programs have been developed with the object of helping to keep these executives in a condition of optimum health and vigor.

An executive may be considered to be one who spends the major part of his time planning for and directing the work of others, although for the purpose of executive health programs they are sometimes defined further as those in the upper salary bracket, starting at \$8,000 or \$10,000 or \$15,000 per year in various company executive health programs. The importance of the health and competence of the executive group is apparent when one considers that the effectiveness of one executive is reflected in the activities of dozens or hundreds or thousands of workers who are influenced by his directions.

Special Stresses and Strains

The problems of aging are basic to the executive health program because their ages range from about 40 years up, with the majority being older than 50. The executives have special stresses and strains which demand peculiar physical, mental and emotional qualities for survival. The various things like vivid imagination and driving energy which makes executives effective may also be

precisely the things which lead the man to disaster, particularly if he is working somewhat beyond his resources of ability and vision.

The most important feature of any executive health program and probably the one of greatest value is the careful periodic health inventory to assess the physiological and emotional condition of the man with reference to the demands of the job. Such a detailed health inventory should certainly be part of the program of selecting men for promotion. The danger of promoting a man into a position which will drive him beyond his capacity may thereby be avoided.

Executive Health Programs

Executive health programs are usually voluntary and eligibility differs. In some companies only the highest management levels are included, and in others the management levels include department heads, superintendents, and foremen. The voluntary programs usually include a large majority of all eligible executives. It is probable that a physical inventory should be compulsory in promotion to positions of high responsibility, although it generally is not.

The majority of the plans offer annual examinations, although some offer them less frequently. A typical schedule calls for an examination every two years for those between 30 and 40, annually for those between 40 and 60 and semi-annually thereafter.

Examining Physicians

There is also no uniformity in the choice of examining physicians. Some companies prefer to let their men go to physicians or

clinics of their own choice, others refer them to specific outside clinics, and others have the company physician do the examination within the company medical department. In any of these schemes, the method of reporting also varies from direct report to a senior executive of a company to a report only to the man who has been examined.

Costs Vary

The costs vary from about \$10 to about \$300, with a median of about \$30. In the General Motors program, which covers some 6,500 executives at the present time, the average cost is \$130 per examination. The total fee depends somewhat upon the physician's judgment as to the needs of the man being examined.

The ultimate value of the examinations both to the individuals and to the company depends directly upon their completeness. They should certainly be sufficiently complete to enable the examiner to say with confidence that he knows the conditions of the various body systems. The findings revealed by health surveys show certain general facts. There are defects of function or structure found in about 60 per cent, and in about 40 per cent of these instances the abnormal conditions were not known prior to the examination.

The most common finding is overweight in 20 to 30 per cent and stomach distress in 10 to 12 per cent. High blood pressure is found in 7 to 15 per cent and heart disease in 2 to 10 per cent.

—To page 76



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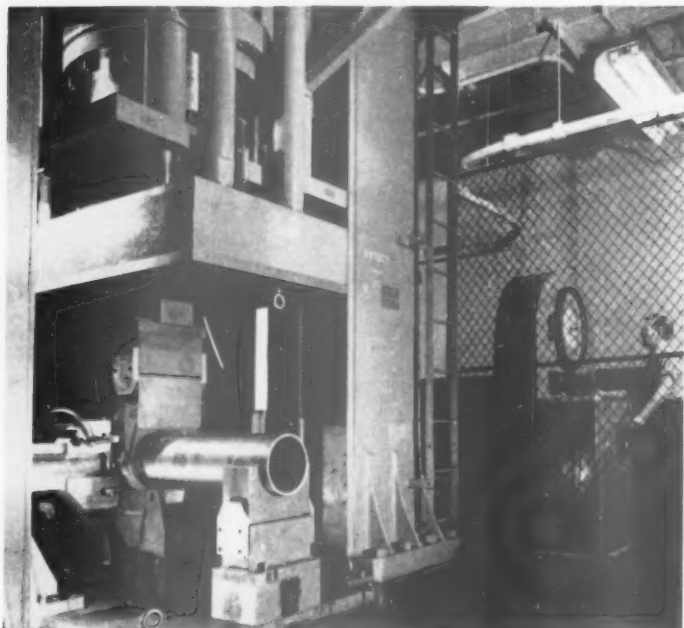
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The operator is protected by heavy screens that roll into position around the control cabinet on an overhead track. A foot switch connected by cable into the side of the cabinet permits the operator to hold the gate into the testing area closed during the time load is applied.

Proof testing is required for quality control of all parts having flash butt welds between lengths of steel tubing and mating drop forgings. The new Baldwin machine makes it possible to test flash butt welds with cross sectional areas up to 67 square inches and having diameters up to 30 inches. A clearance of 6 feet between columns provides adequate space for the fixtures which are required for holding the parts in different positions.

For convenience in production testing the new testing machine is located adjacent to the machine shop where the parts are finish machined after tests. For tensional tests in this 28-foot high machine, landing gear parts are taken to the floor above. Grips for tensional tests are provided on top of the sensitive crosshead and on another adjustable crosshead above it.

Health for Employees Is Industry's Opportunity

AMERICAN INDUSTRY'S greatest opportunity to cut costs and increase productivity, reduce prices and raise national prosperity and the standard of living lies in promoting total health for its employees.

This conclusion was reached by some of the country's top medical authorities meeting with local industrial, labor and community leaders in a forum at the Woman's Medical College of Pennsylvania in Philadelphia, March 11.

In a series of panel discussions, the conferees also decided that action should be taken at once to extend study and research in the

field of 24-hour industry-sponsored health and that pilot operations should be set up to provide the basic data on which an industrial firm could base a program.

Lack of experience and statistics, of cost data and procedures argues the need for immediate exploratory projects, said Dr. Burgess L. Gordon, president of the Woman's Medical College, the first for women in the world.

"We do know that 40,000,000 man-days are lost at a cost of almost a billion dollars each month through employee illness," said Dr. Gordon in keynoting the forum in the auditorium of the college.

"And we do have a little evidence here and there, pitifully meager to be sure, of what total health programs could save. For example, in Richland, Wash., where General Electric Company sponsors something mighty close to total health for employees, savings on wages alone—which are paid sick employees—more than pays for the company's share in the program.

"Hoffman Radio Corp. and the Leach Relay Co., Inc. of Los Angeles, Calif., reported only last week the details of an organization-wide comprehensive health checkup among employees in which a score of community agencies cooperated. A company official declared that the checkup was expected to benefit the company enormously in terms of better employee relations and in reduction of lost time due to illness.

"There is every reason to believe that preventive and industrial medicine, directed at the goal of total health for employees, can be a multi-billion dollar source of present and future industrial power in the United States.

"This can be realized only through a total health program for employees which is pioneered by leaders of industry and labor, directed by leaders of industry and labor, directed by leaders of the medical profession and wholeheartedly supported by leaders of

—To page 74

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Health for Employees

—From page 72

the community," Dr. Gordon said.

Dr. William A. Sawyer, medical director of the International Association of Machinists, Rochester, N. Y., declared the cost of absenteeism in manufacturing industries alone due to non-occupational sickness and injury "makes it one of our paramount national problems."

While there are no comprehensive figures on which to base the costs of mental hazards to industry, Dr. Francis J. Braceland, psychiatrist-in-chief of the Institute of Living, Hartford, Conn., told the group that emotional illness and maladjustments are reported to be second only to the common cold as a source of absenteeism. Seventy per cent of dismissals in industry are due to some form of social incompetence and only 30 per cent to technical incompetence, he reported.

The physician is only now beginning to take his place in top management levels of industry, according to Dr. Norbert J. Roberts, medical director of the Pennsylvania Railroad, Philadelphia. Top management has been making increasingly effective use of the services the physician can supply. He called upon top management to explore the possibility that it might profit by employing the physician's specialized skills and knowledge at a policy-making level.

Recognizing that the Philadelphia area has a unique opportunity to pioneer in the concept of total health for employees, David E. Williams, chairman of the board of the Girard Trust Corn Exchange Bank, Philadelphia, cited the experience of such a program in Richland, Wash., also mentioned by Dr. Gordon, where both absenteeism in industry and the death rate in the community have been just half the national average over the past five years.

Labor's contribution to health maintenance was cited by Dr. Leo Price, medical director of the Labor Clinic, Ladies Garment Workers Union, New York City. But, he pointed out that the number of workers profiting from any form

—To page 88

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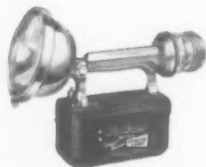
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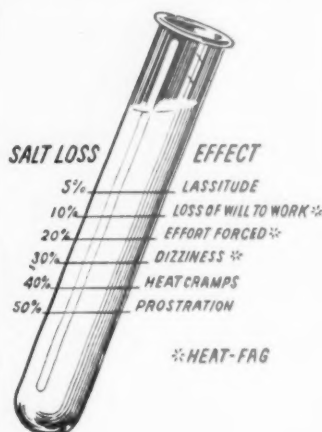
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Industrial Health

—from page 70

This last finding is not surprising, since it is well known that heart disease is the leading cause of death among men in this age group. It is not known whether heart disease is an occupational hazard of business executives, but it is known that violent emotion may affect the heart profoundly.

Cancer is the second cause of death among men of the executive age group, and signs or symptoms of early cancer of the lung, stomach, bowel and prostate should be searched for carefully. Cancer of the large bowel will be found in up to 2 per cent of the executive group. Diabetes is also to be expected in about 2 per cent and usually is fairly easily controlled if discovered for the first time in the health inventory.

Other conditions which are commonly found are neuroses, defects of vision, rectal abnormalities, including hemorrhoids, in up to 11 per cent, abnormalities of the prostate in 45 per cent, gall bladder disease in 1 or 2 per cent, hernias in 3 or 4 per cent, and arthritis in 4 or 5 per cent.

There is no doubt that a careful systematic plan of health promotion will return to the industry many times its cost. Better health among the executives means better morale, increased efficiency and less time lost because of illness.

There are other less tangible but certainly valuable results such as the early return of an executive to his job because of early discovery and adequate treatment of minimal tuberculosis and, in some instances, the saving of lives by early discovery of malignant processes in a stage in which they can be successfully treated, either medically or by surgery.

Heart Disease in Industry

Coronary Artery Disease in Industry. By W. Gordon Garnett. Industrial Medicine and Surgery 23: 59-63 (February, 1954).

During the past ten years, there have been a number of attempts in the medical literature to explain the relationship between exertion and damage to the heart. It has been shown that statistically

such heart damage occurs with equal frequency in laborers, white collar workers and professional persons. In a large group of patients, more than 50 per cent of the attacks had their onset during sleep, slightly more than 46 per cent occurred during mild or moderate activity and two per cent followed heavy or unusual strain.

These statistics have been confirmed a number of times, although some of a series of patients have shown as high as five per cent of acute heart attacks following strenuous activity. The general conclusion is that there is "little doubt that trauma is not a common cause of the onset of coronary occlusion."

Relatively long periods of insufficient circulation to the heart muscle and blood clots in the coronary artery for a long time are more commonly encountered causative factors in heart disease. A long period of insufficient circulation to the heart muscle with the resulting acute heart damage induced by unusual physical or emotional strain is readily understood and is widely accepted by physicians in the field of heart disease and industrial medicine.

Where compensation is an issue, every effort should be made to get an accurate history. This history, if it is to show a causal relationship between the heart attack and the work, should show that the individual participated in greater exertion than he was accustomed to and that the exertion was sufficiently severe and prolonged to produce actual damage to the heart.

The history should also show that distress resulting from the strain persisted for a half-hour or more after the end of the physical strain. If the stress persisted for less than a half-hour, it is not likely that permanent damage to the membrane around the heart was produced by that particular episode.

In a number of cases which develop while the individual is doing his usual work without unusual strain, it has been generally accepted that the attack was due to a clot in the blood vessel feeding the heart which probably took days or weeks to develop and that

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*Accident Facts, 1953 Edition. Published by the National Safety Council, Chicago, Illinois.

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the resulting attack would have occurred in a short time, regardless of any activity or lack of activity.

There has been an increase recently in the number of heart disease cases presented to compensation boards or industrial accident commissions for adjudication. In part this is because of the greater number of cases occurring in the general population, but the rise in the cases in the general population and the rise in the general number of industrial accidents does not begin to explain the increase of 50 per cent or more in the cases of heart disease. The trend is fairly consistent in the United States and Canada.

There are a number of reasons for this, and the medical profession is contributing in part. There are no established criteria for the clinical judging of such cases. They could well be produced by a committee designated by the interested medical organizations.

Most state workmen's compensation acts were passed at a time when coronary artery disease was not considered much of an occupational hazard. No special provision was made for this condition. In California some years ago, the law was modified so that state employees developing heart disease on the job are assumed to have an occupational connection, unless proven otherwise. A logical extension of this is to apply the same reasoning to every employer and every employee.

The referees of the industrial commissions generally are required to evaluate the medical testimony in disputed cases and there is no appeal from their decision except upon matters of law. This probably results in less unbiased decisions than would result if a panel of physicians expert in the field were available to advise the referee.

This is a growing symptom of the philosophy of work in general being harmful. This is not necessarily true because it is well known that abrupt retirement often results in rather untimely death.

All of these factors tend to increase the compensation claims for heart disease and to increase the difficulty of keeping those who

have recovered from heart disease employed. It has been found that about 80 per cent of those recovering from coronary artery disease are physically capable of doing some type of gainful work.

In order to permit these people to be employed in industry, the employer must have some sort of assurance that the person employed will be able to perform the required duties of the job without aggravation of his disease and that his employment will not jeopardize the rights or benefits of other employees, such as might be stipulated in a union contract, and that the organization will not be unduly penalized by recurring complications.

The employee should be encouraged to look forward to returning to work and should be encouraged to experiment with rehabilitation as soon as his physical condition permits. Physicians in general are often at fault in preaching overcaution and engendering fear of work in such patients.

Muttling Noise

Reducing Industrial Noise, General Principles. By F. G. Tyzzer. The American Industrial Hygiene Association Quarterly. 14:265-285 (December, 1953).

The incentives for noise reduction vary roughly with the intensity or loudness of the noise. Because the cost of the noise reduction must be balanced against the benefits, which usually do not show on a balance sheet, attempts to reduce noise are generally limited to areas where the situation is definitely dangerous. Limiting values which it is attempted to reach will depend on a number of conditions such as the nature of the operation being considered, the number of workmen being exposed and the time of exposure.

If the noise is fairly steady, it is relatively easy to make measurement and to determine the extent of interference with speech and other auditory stimuli. If the noise is of an intermittent nature, it may not be possible to make any accurate measurement by any of the accepted standard methods, even though the noise may be subjectively objectionable. Sometimes intermittent noises can be esti-

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ated by comparison with a measurable steady noise.

Measurement of the noise must be weighted by frequency in some manner. It is generally agreed that low pitch noises, such as the rumble of an industrial truck on a rough floor, are less objectionable than the high pitched noises such as the shriek of a circular saw.

There is no equipment now available which will directly measure the level of loudness in such a manner as to give direct information on such things as interference with speech comprehension or damage to hearing. The intensity can be measured in either octave bands or various narrow bands and these results interpreted in terms of major effects on humans by various techniques, however.

The ultimate criterion of loudness is the effect on the human ear. Surprisingly good judgments of loudness, particularly in the speech frequencies, can be made simply from the distance at which loud speech can be understood. Simply listening is also a good, quick method of separating areas of intense noise from those with a lower or acceptable noise level.

There have been various criteria of damage to hearing by noise but all are necessarily tentative and are qualified as approximate levels of steady noise where damage is likely for some individuals. It is generally agreed that damage will result from even very short exposures to extremely intense sound but that even the loudest noises commonly found in industry will cause damage to hearing only as the result of exposure over a period of time. It is likely that the more intense the noise, the more frequent and longer the rest periods must be if hearing damage is to be avoided.

One criteria which has been defined is the speech interference level. This is taken as the average of the intensity in decibels at the three bands of 600 to 1200, 1200 to 2400 and 2400 to 2800 cycles per second. If this speech interference level is 85 decibels, a shout can be understood at one foot and at 75 decibels a loud voice at one foot or a shout at two to three feet. At 65 decibels, a loud voice

can be heard at three to four feet. These values are, of course, subject to some modifications, and in certain types of noise exposure, speech can be understood at considerably higher levels than are indicated here. This is particularly true of impact noises where speech is heard and understood at intervals between the impact peaks.

For purposes of discussion, noise can be considered as a fluctuating air pressure which can effect the ear in an undesirable way. This air pressure can be generated by direct action in the air, as in the case of gas engine exhaust or the noise from high speed gas flow in general. More commonly, the vibration in the air is produced by vibration of some solid object or surface on which work is being done. An excellent example is a large metal object being chipped with a pneumatic hammer where the exhaust from the hammer produces noise directly and vibration of the metal object produces its own noise indirectly in the air.

In many instances, the noise energy source may be small, as in the case of gear phases, and the noise may be transmitted through solid paths, such as shaft and bearings, to larger surfaces which radiate the noise. The amount of noise energy transmitted to the air depends upon the area of the vibrating source, the amplitude of its vibration and the frequency at which it is vibrating. In studying industrial noise, it is quite important to determine the paths by which the noise is transmitted to the air, since if the path can be interrupted at any point, the noise can be readily controlled.

The amplitude of vibration of a noise source depends upon the energy which is being put into it and the stiffness and weight of the vibrator which limits the amplitude. Most vibrators have one or a series of resonant frequencies at which the weight and stiffness cancel each other out and at which the amplitude of vibration is limited only by the internal damping of the resonator. If these resonant frequencies are in the relatively low frequency region and widely spaced in frequency, the amount of noise frequently can be greatly reduced by changing either the



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frequency of the exciting force or the weight or stiffness of the resonating part. If this cannot be done, possibly because the resonant frequencies are too closely spaced, the intensity can still frequently be reduced by increasing the damping of the resonator.

In the open air, intensity of sound from a relatively small source decreases as the square of the distance from the source since the sound is radiated equally in all directions. In a closed space such as an ordinary factory room, however, sound is reflected from the floor, walls and ceiling, so the direct sound is reinforced by reflected sound. At a very short distance from the source, the sound intensity becomes practically constant and does not fall off with distance.

In a situation like this, if the walls and ceiling are treated with sound absorbing material so there is little or no reflection, the sound level will tend to fall off directly with distance. This condition does not hold, however, when the room is large and has a low ceiling. If the smallest horizontal dimension of the room is ten times the ceiling height or more, the sound level tends to decrease continuously with distance from the source and there is no constant level except very close to the outside walls. Under these conditions, there is relatively little advantage in sound absorbing ceiling and walls.

Where machines are closely spaced in a room with a low ceiling, there is some advantage in putting absorbing material on the ceiling to reduce reflected noise but the amount of reduction is not great unless the spacing between the noise sources is at least equal to the height of the ceiling.

Sound-absorbing material in a plant is useful if there is intermittent or impact noise since the absorbing material will greatly reduce the time required for the noise to die away after the impact.

There are many general principles in planning a noise reduction campaign, particularly in planning a new installation. One of the most fundamental is the selection of non-noisy in place of noisy operation, such as welding or compression riveting instead of



No. 681
Work Shoe

No. 623
Dress Oxford



SAFE

from the ground up!

These two new plain toe *Iron Age* Safety Shoes, made by the Iron Age Division of the H. Childs & Co., Inc., Pittsburgh, Pa. . . . give more than essential protection . . . they give safety *plus* rugged masculine good looks . . . *plus* dependable, day by day solid foot comfort.

Look at the plus values in this No. 623 Dress Oxford, for example. It's a plain toe, military style oxford with soft pebble grain leather uppers for good looks and foot-conforming comfort. For safety, No. 623 has an extra protective welting, a cork filler, and the proved protection of a well concealed Steel Toe Box. Dacron stitching throughout. And the oil-resistant, heat and acid resistant, non-slip, non-marking *Vul-Cork Neoprene* sole gives it long wearing, soft-stepping safety . . . *from the ground up!*

And, for a work shoe that looks good . . . and feels good on the foot . . . that is an ideal steel toe shoe for wear wherever oil and grease are encountered . . . examine the plus values of Iron Age's No. 681 Work Shoe. It has a cork sheet filler, wide steel shank, brown horse-hide upper and vamp lining, with rolled leather top facing. Dacron stitched throughout. And the Vul-Cork Neoprene Sole and Heel provide the maximum of long-wearing, resilient comfort . . . *plus safety from the ground up.*

"If you use safety shoes in your plant, look at the sole first. If it carries the *Vul-Cork*, or *Vul-Cork Neoprene* label, you will get more than your money's worth."

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. . . so light, so flexible, so resilient you can roll them up — right in the palm of your hand.

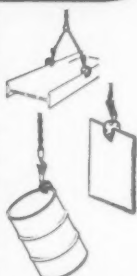


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4
SIZES



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TWIN LIFTER



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DRUM TILTER



DRAG CLAMP



DRUM OPENER

3-M-1

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impact riveting, pressing or rolling instead of forging, grinding instead of chipping on castings and welded joints, use of electrical or quieted pneumatic tools, mechanical stripping of work from dies instead of air blast stripping, low speed instead of high speed machinery, substitution for inherently noisy materials of inherently less noisy material, wide spacing of noisy machines, belt drives instead of gears, hot working of metals instead of cold working, etc.

Other effective means includes segregation of noisy operation, so that only a few instead of many workers will be exposed. In connection with this, personal protection may be required for the exposed workers. Ordinary ear plugs may be expected to give noise reductions from about 15 decibels in the low speech frequencies to about 35 or 40 decibels at the highest speech frequency.

Reduction of noise energy at its source is a highly desirable method of prevention of noise but it is often impossible because the noise energy is such an infinitesimal part of the mechanical work being done. Occasionally something can be done in this line, however, as by tapering a die in a punching operation so that the process will be a type of shearing instead of an impact punching and the sharp cracks will be reduced to a less objectionable thud.

Noises due to rattles, lost motion, unbalanced alternating forces or friction can generally be reduced at their source by ordinary good maintenance procedures such as lubrication, securing, and stiffening of loose panels, dynamic balancing of rotating parts, etc.

Where the noise is due to fluctuations or turbulence in gas flow, there are a variety of methods for reducing the velocity and streamlining the flow if the velocity is not necessary to the operation. The most obvious ones are ordinary mufflers, use of two or more valves in series to reduce the speed around the edges of each, and the use of well streamlined curves and nozzles and fittings for gas flow.

If the noise cannot be reduced at the source, sometimes its transmission or radiation can be inter-

rupted. For high frequency sound intensity is about proportional to the radiating area so the sound level decreases 3 decibels or more each time the radiating area is halved. For low frequency sound, the decrease with decrease in radiating area is even greater.

A good example of reduction of noise by reduction of radiating area is the clamping of sheet metal close to the point at which it is being worked by a clamping arrangement sufficiently massive that it will not in itself vibrate and become an appreciable source of noise.

Reduction of the noise passed through solids depends upon the introduction of soft or flexible parts, such as flexible couplings and shafts or resilient mountings for machines or machine parts. This introduction of resilient parts is not as difficult as it sounds because the amount of springiness does not need to be great for noise reduction at high frequencies which are the most important and very soft mountings are not required. It is particularly important that large vibrating surfaces, such as sheet metal ducts or large sheet metal panels, should not be rigidly attached to noisy machines as they produce excellent radiating areas.

Air borne noises can be contained by any sort of a total enclosure, particularly if it lined on the inside with acoustical materials to keep down the sound level within the enclosure. If openings must be made, they will act as noise leaks and if the openings are large compared to the size of the enclosure, the noise reduction will be quite small. The material of which enclosures are made must be impervious or non-porous or the noise will be transmitted directly through it. For this reason, most sound absorbing materials are not directly useful for such enclosures.

Partial enclosures may be useful for protecting workers from direct sound of the machine where the noises in the relatively high frequency region and the partial enclosure will throw an acoustical shadow over the worker behind it.

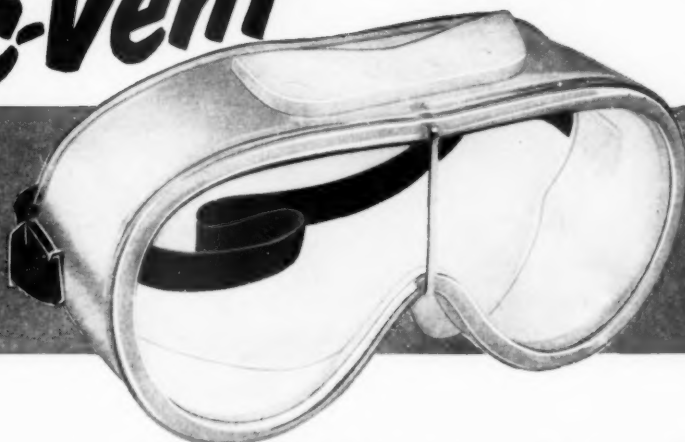
The most common use for sound absorbing materials is the general

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**Stops Liquid Splash
Greater Safety
More Comfort**

**SOFT VINYL FRAME
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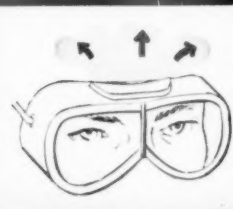
**Model 440SV
Methacrylate Lens
Model 441SV
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Here's How It Works



Moist air accumulates at top inside of goggle causing inside of lens to fog.



STAC-VENT drafts off hot, moist air from inside goggle just as a chimney carries off smoke.

... a new principle in goggle ventilation

Greater safety... No liquid, chemical or other hazard can reach the eye. Ventilation holes are protected under the "Stac-Vent" hood located properly to eliminate lens fogging. Methacrylate or Acetate Lenses and Vinyl frame protect against all hazards: impact, chemical splash, sparks, molten metal.

Safe Ventilation... "Stac-Vent" provides draft ventilation at the top and center of the goggle (where warm, moist air normally accumulates). Large openings for ventilation are possible because they are safely shielded by the "hood".

More comfort... Soft Vinyl Frame form-fits the face. Goggles are lightweight... hug the face without pressure, thanks to soft edge fins which yield to the contours of the nose and face.

Choice of Frames and Lenses... Soft Vinyl Frames are available in clear, transparent green or opaque black with STAC-VENT, Regular (Holes) or Screen Ventilation; also no ventilation.

Furnished with clear, light, medium or dark green Methacrylate Lens, for heavy impact.

Furnished with clear or medium green Acetate Lens for light impact.

PLUS ALL THESE FEATURES

Fits over all prescription glasses... Extra wide 6" lens and large frame fits over a prescription glasses — metal or horn-rimmed. Soft Vinyl Frame is translucent (except opaque black) for partial side vision. Front of frame protrudes to act as bumper, protecting the lens surface when thrown on table or floor.

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National Safety News, May, 1954

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Straightaway

SOUND
PROTECTOR

reduction of noise in the reverberant noise field at some distance from the source of the noise. It is not effective for workers less than five to ten feet from the source. The amount of reduction by treatment of the walls and ceiling with sound absorbing materials is usually about ten decibels maximum. There are many cases in industry where this reduction of five to ten decibels may be all that is required.

Where the installation of materials on walls and ceiling is impractical because of the necessity for putting up scaffolding for the

installation and interruption to production, space absorbers suspended in the upper part of the room can give pretty fair noise absorption. They usually require more sound absorbing material in panels mounted directly on the walls and ceiling, but they are generally easier to install.

Although many noisy operations can be quieted by rather simple means, it should be remembered that many others are difficult and complex and the services of competent acoustical engineers may save both time and money.

They Can't Overlook "Mr. Bones"



"Mr. Bones," macabre safety engineer, helps the safety cause at the Colorado Fuel and Iron Corp., in Pueblo, Colo.

CF&I's version of "The Thin Man" poses for dangerous practice pictures, similar to the hazardous crane hitch-hiking shown above, as a regular feature of CF&I's plant newspaper, *The Blast*.

The safety warnings which accompany "Mr. Bones" portraits are—to say the least—in a whimsical vein. He aids the CF&I campaign against *all* accidents, among the steel mill's 8,500 employees. He is featured on the company's safety posters, and on personal contact cards, which are distributed to workers by the foremen.

CF&I reports this approach has produced results. The company shows four disabling injuries so far this year, compared with 11 for the same period last year.



Rockwood FogFOAM SpotPROTECTION System automatically drenches loading platform.

How to muzzle a vicious fire hazard

Dangerous, small-area fire hazards can viciously destroy life and nearby property — if not properly protected.

The tank truck loading platform above, for instance, imperils not only the tank trucks being loaded but also the storage tanks in back of it. Should a truck connection break during loading causing a static spark thus igniting a truck, millions of gallons of gasoline would go up in flames.

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manually. Automatic operations are for fixed temperature sprinkler type fire detectors or for heat actuated devices. Special Systems also available for use with Rockwood FOAM Maker Chambers.

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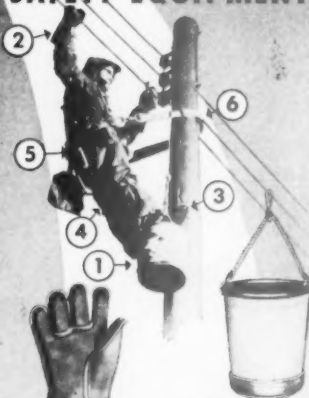
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Health for Employees

—From page 74

of direct medical service is insignificant in relation to the entire working population.

Discussion in the three panels of the forum revealed that most if not all of the tools necessary for establishing total health programs for industrial employees now exist, and that necessary medical and health procedures are known and in use to some extent. The problem, it became evident, is to bring these elements to bear in concert toward the objective of total health.

Some of the pertinent questions about a total health program for employees which were discussed included:

What would be the full saving of a total health program that could be realized by the employer? the

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

If you're sympathetic, easily appreciate someone else's difficulties and show it, then you have three rare qualities of good personality.

★ ★ ★ ★ ★ ★ ★ ★ ★ ★

employees themselves? the community and the nation?

How much could be added to production and productivity for industry? to prosperity and the standard of living for the nation?

What would be the actual cost? and what specific steps should be taken to establish such total health programs?

How far can industry go in sponsoring and financing such 24-hour health protection for employees without becoming paternalistic?

Does the experience of school health programs in improving child health in the nation indicate a sound pattern which industry might follow in improving adult health?

Discussion of these and other questions raised in the forum indicate both encouraging evidence to support the total health idea and a lack of comprehensive statistics, information and experience necessary to put such programs in operation on a national scale.

It is because of this lack of ex-

perience and statistics, of cost data and procedures that the forum recognized the need for immediate exploratory projects in the field to be essential. Such projects would be pioneered jointly by industry and labor under the direction of the medical profession. Financial support for the necessary research and pilot projects would come from industry and foundations. Close cooperation and support of the communities in which such projects are undertaken would be essential.

Learned from Failures

—From page 19

ing with this and that in an effort to improve himself, his men and their product. He has the drive and enthusiasm to get things done better, easier, more efficiently, and more safely. Upon making a decision or receiving an order, he immediately starts the ball rolling to get it into effect.

4. *Goals and Accomplishments.* A leader's goals are excellence and perfection, and he constantly works for their achievement. He has high standards of sound workmanship and honest performance, and he also has a sense of social, intellectual, ethical and moral values.

5. *Responsibility, Reliability, and Accountability.* A leader enthusiastically accepts responsibility, and he proudly holds himself accountable. He knows how to carry responsibility and also how to delegate it. He knows the rules, and he can be relied upon to abide by them to the letter.

6. *Co-Operation and Friendliness.* A leader gives credit where due and gives censure in an objective and helpful manner. He knows how to deal with people and how to follow as well as lead. He cooperates in the best interests of all concerned and is a past master in the art of give-and-take.

7. *Calmness and Patience.* A leader is patient with a slow learner, and his calmness and his even temper allow him at all times to exercise his best judgment rather than being stampeded.

8. *Faith, Loyalty and Humility.* A leader has confidence and faith in himself and in his fellow men;

Don't be fooled by Fast Action Cleaners

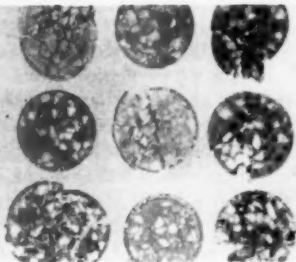
You can't judge a cleaner by fast wetting alone. When harmful ingredients are added to increase the speed of cleaning . . . you also increase maintenance costs—you sacrifice the beauty and appearance of your floor. Because harsh so-called fast wetting cleaners work by **ATTACKING** soil **AND** your floors. They not only remove dirt and grease, but relentlessly wear away the floor surface; rob resilient floors of natural oils, causing them to become brittle, colors to bleed; build up a crystalline expansion in cement and terrazzo causing untimely deterioration. Due to the roughing and pitting of the surface, floors become increasingly harder to clean each time, and labor costs go up.

That's why Hillyard **SUPER SHINE-ALL** has no equal in the cleaning field. Its superior cleaning power, by safe neutral chemical action, has been proved non-injurious to finest floors or finishes. It is the result of nearly 50 years specialization in making cleaning a faster, safer, less expensive operation. Through the years it has won the approval of the Asphalt Tile Manufacturers, Rubber Tile Manufacturers, Cement and Terrazzo Contractors, Portland Cement Companies, Maple and Oak Flooring Manufacturers.

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How Improper Cleaners Ruin Terrazzo and Cement

Photos show results of Tests conducted over a 4-year period by the American Bureau of Standards.

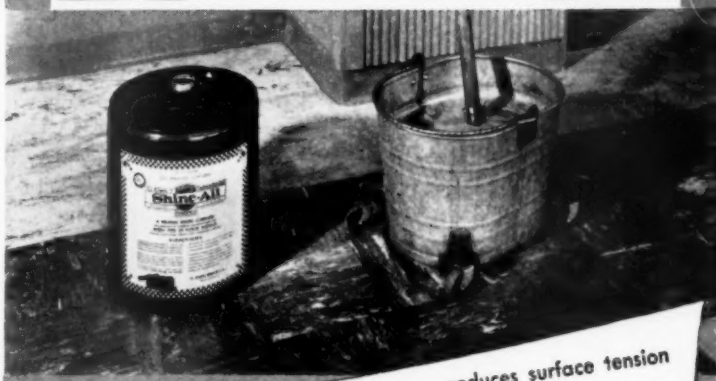


↑ Terrazzo disks on which cleaners containing soda ash and trisodium phosphate were used. Test applies equally to cement. Note damaging action which has occurred in the porous cement.

Terrazzo disks on which a neutral chemical cleaner was used, remain in perfect condition. The National Terrazzo and Mosaic Foundation states . . . "soaps and scrubbing powders containing caustic alkali should never be used in maintenance of terrazzo . . . use a good neutral cleaner."

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2. by penetrating action—gets under the dirt layer.
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5. by suspending action—lifts and suspends soil solids such as dust, soot, in liquid for easy removal.
6. by dissolving action—reduces water soluble material to solution.

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HALVES CLEAN-UP TIME

SUPER SHINE-ALL cleans instantly by 100% neutral chemical action. Leaves no harmful residue; eliminates the extra labor step of rinsing. Unlike heavy bodied soap cleaners it will not form a dulling calcium soap film so difficult to remove. Maintenance continues to be quick and easy—and **Super Shine-All** cleaned floors retain their original freshness for years. Get in touch with the Hillyard Maintaineer (floor expert) near you. He'll be glad to show you how to save cleaning costs the superior Shine-All way.



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he is loyal to his superiors and his subordinates. He is characterized by humility—the ability to subordinate his own desires in order to encourage the best efforts of his subordinates. He multiplies himself through the loyalty, enthusiasm, incentive and cooperation he instills in others.

9. *Integrity.* A leader is intellectually honest—honest with himself, with his boss and with his men. He admits when he is wrong and he stands his ground when he is right; he tells the truth even when it hurts; he answers inquiries in the basis of facts and not on the basis he thinks the boss would like to hear. When he doesn't know, he admits it, when he has only an opinion he doesn't state it as a fact.

Paraphrasing, I believe that lack of complete intellectual honesty or lack of comprehension of its meaning, is a basic fault underlying many of our problems.

These, then, are the ingredients of true leadership: these must be the attributes of all members of management if they are to accept their full responsibilities. These are not things with which people are necessarily born; they are traits which can be developed if the desire to do so is present. Individuals should measure themselves by the yardstick of these criteria with complete intellectual honesty and be guided by signs of weakness and signs of strength; work on the weakness and capitalize on the strengths.

All members of management have some, and others all, of these traits of leadership, in different degrees of strength or weakness, and every one in management is capable, through his own efforts or with the help of others, of improving his qualities of leadership. This is his responsibility.

My full-time employment in the industry started almost 22 years ago when I went to work on a drilling rig for a contractor at Kettleman. The only safety materials or equipment he had, except for the guards which were the standard of the day, were a first aid kit and a derrick escape line. In three years working rotary for two different contractors and one operating company I don't recall

any mention of a safety program; and yet, there was just one lost time accident on the rig—the rig, not the crew—on which I worked in the three-year period.

That's a pretty fair safety record, in my opinion, yet we had no safety program, no safety director—in fact, we didn't use the word safety. The reason for a record like that was because management in those companies accepted accident prevention as part of its job. The best way was the safest way, and there was no compromise. In the exercise of their managerial responsibilities, they were automatically thinking safety, efficiency, economy, quality, speed. They never thought of the fact that there was a safest way or a best way, as many men in the industry now do.

Safety Is Everybody's Job

To develop a good safety program and a good safety record, safety must be a part of the job—not apart from the job. Safety must be as much a part of the president's job as proper departmental coordination, making proper decisions about expansion; safety must be as much a part of the superintendent's job as getting out more production, cutting lifting costs; safety must be as much a part of the toolpusher's job as figuring out the right mud to prevent loss of circulation, and using the right bits, rotation speeds and weights to correct a crooked hole condition; safety must be as much of the driller's job as making hole and keeping the rig in shape.

When top management sets up a safety department, it does so to help line management carry out its responsibility for safety; too many members of line management think that, when a safety department has been set up, they have been completely relieved of their responsibility for safety.

Ability to manage is the ability to get things done through others. Management itself produces nothing. The man on the brake, of course, works in two capacities, since he both directs and does physical work. The latter represents production, but his production as a member of management is measured by the output of the

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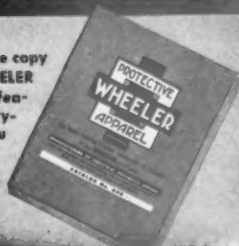
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crew. The lease foreman produces no oil himself—he gets that done through others. His performance is measured by the quality and quantity of the work of the men he directs. The major job of management is the application of ideas to the individual. Consequently, there is a basic need for direct determination, by his immediate superior, of the ability of each individual to perform his work satisfactorily.

Application of a safety program must be tailored to fit both the need and the performance ability of the individual. The man who is just set up on a new job certainly needs different treatment from the man who is possibly half-trained and on the job six months. The application of the safety program to the latter would certainly be different from that presented to the fully-trained, self-reliant occupant of a similar position. The average number of men directly responsible to any member of line-management is between five and six. A good leader can quite easily tailor his presentation to fit the individual requirements of this small number of individuals. Even so, you'll hear grumbings to the effect that, "My job is like a graveyard; they're always adding something to it and never taking anything out. I haven't got the time."

Setting A Goal

It doesn't take time. It takes leadership and management ability. Let's accept safety as the complete responsibility of line management; let's make safety an integral part of our jobs. Let's not think of our standard of performance as being comprised of quality, quantity and safety—let's think of it as quality and quantity—with safety a part thereof.

As a means of making safety a part of the job, I suggest that each member of line management, from top to bottom, set himself this goal as a starter: As part of each day's work, not apart from it, perform one extra act directed at accidental prevention. Now it might be picking a tool off the rig floor and putting it on the tool board; it might be showing a man a better way of doing a certain

job; it might be a question or suggestion which would start the development of a safer procedure; it could take the form of a compliment for a good record or a well-maintained lease, or it could be a one- or two-minute objective discussion about an accident which has occurred. I firmly believe that, if we would all start performing that one extra act of safety each day as part of the job, we shall soon find that safety had become part of the job. We members of management will then have accepted responsibility for safety.

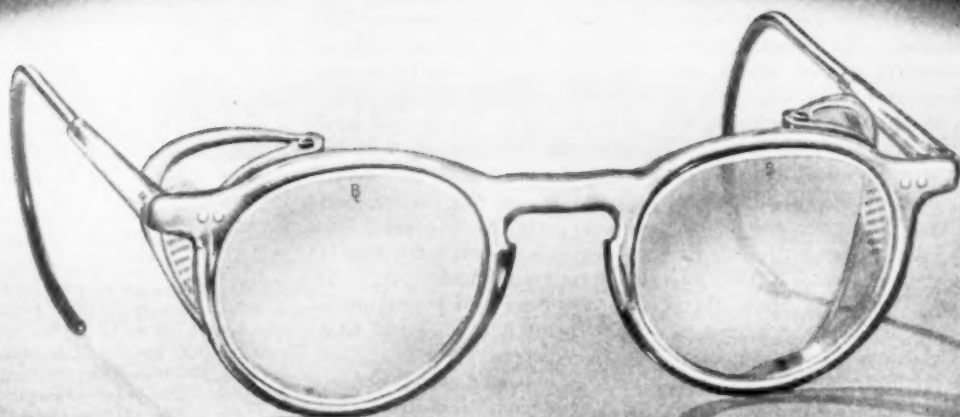
Developing and carrying through a safety program to fruition in the form of an excellent safety record is analogous to ascending a flight of stairs to the derrick floor. The steps represent the different levels of management—first, the president, then the vice president, next the general manager, superintendent, tool-pusher, and driller. The strength of each step is equal to the degree to which each member of line management has accepted his responsibility to provide leadership.

The handrail of the stairs represents the safety materials, services, and other tangibles provided by the company. The goal of the safety program is the derrick floor and the men who work there. The safety program starts up these stairs with a firm assist from the handrail. If there is a weak step in the stairs, if one member of line management does not carry out his responsibility of providing leadership, the safety program crashes through. The handrail alone—the safety director and safety posters—can't save it. If, on the other hand, all the steps are strong, the safety program gets through to the men on the derrick floor, where the good safety record will be developed. Managerial weakness at any one point will prevent the program from getting through to the necessary point of application—the individuals doing the work.

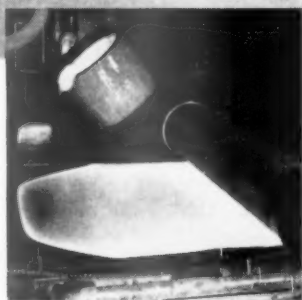
The safety program is only as strong as the weakest member of line management and the degree to which he accepts responsibility for safety as part of his job. Let no one of us be the weak link; let us all work to strengthen those weak links which we find.



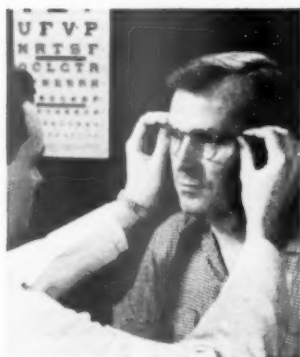
SAFETY LENS QUALITY IS NEVER A LUXURY



Bausch & Lomb Z-79 all-acetate safety frame with Bal-SAFE lenses



From sand to glass—to finished safety lenses, manufacturing methods are precision controlled in the world-famous Bausch & Lomb plant at Rochester, New York.



Where visual correction is needed, there's extra safety in Bal-SAFE lenses professionally prescribed, ground to the worker's prescription.

Bausch & Lomb glass technology insures an **EXTRA** margin of safety in Bal-**SAFE** lenses

For eye protection the lens is the thing. It may stand between a worker's precious vision—and tragic, eternal blackout.

You provide the finest protection science offers—when you specify Bausch & Lomb protective eyewear with Bal-SAFE impact-resistant lenses.

Only the finest glass is used—made in the nation's only plant devoted exclusively to production of optical glass—Bal-SAFE lenses are free from imperfections that can lead to disturbed vision, headaches and nausea. Bausch & Lomb heat treating methods insure the precise control necessary for a superior degree of impact resistance.

Acquaint yourself with Bausch & Lomb safety eyewear and with the extra quality of Bal-SAFE lenses. There's a representative in your area.

BAUSCH & LOMB

SINCE  1853

Just mail this coupon with your business letterhead to get your free copy of "Complete Eye Protection."

BAUSCH & LOMB OPTICAL COMPANY
90329 Smith St., Rochester 2, N. Y.

Berks County Program

(From page 46)

Council, National Association of Manufacturers' Safety Committee, Pennsylvania Manufacturers Association and other interested individuals were to be invited. A prominent safety speaker would act as guest of honor. The present committee would remain intact until after formation of a formal Accident Prevention and Health Group and would assist and advise them until they were well underway.

On Monday, March 3, 1952 the Steering Committee again thoroughly reviewed its progress to date and agreed that an organizational meeting would be held following the kick-off dinner on March 24th at noon, at which time the nominating committee would be appointed. It was agreed that the March 10 kick-off affair would be an excellent time to distribute the 9-Point Safety Code.

On March 10, it was evidenced by the 79 representatives of the 35 companies present at the "Kick Off" that a start in the right direction had been made. Of approximately 260 concerns in the Association membership only four or five employed a safety director or safety engineer on a full time basis.

It was the hope of the Board of Directors that this program would increase the ratio especially in the smaller companies (500 employees

or less). If it did nothing else, it would accomplish what A. A. Britton, Jr., vice president, The Carpenter Steel Co., stated, "We at Carpenter feel that the Accident Prevention and Health Group has made an extremely important contribution to our safety program and to our over-all safety thinking, mainly because . . . it gave us an opportunity to bring the members of our plant safety council into contact with the best safety men in their respective fields . . ." At Carpenter Steel a safety program is the responsibility of a full time safety engineer.

Arthur Potteiger, personnel manager, Hofmann Industries, expressed it when he stated, "... we felt perhaps this would only be another of those get togethers and nothing much accomplished. However, now in 1954 (after 2 years of programs) we take an altogether different attitude toward this program." This is due, "... mainly to instructions, education and displays put on at the regular monthly meetings we attend, held by the Association."

We have found that through the establishment of committees working under an active President and two Vice Presidents as officers, the amount of expense and time involved by staff members of the Association are reduced to the barest necessities of coordinating the

efforts of the entire program. This can be done effectively by the use of the safety engineers of our member firms carrying the burden by giving our staff the assistance needed.

As for fundamentals, we have found the following are necessary:

1. Working committees such as Program, Education and Training, Membership and Attendance and Publicity are needed in order to maintain the interest and activity of all.

2. We have discovered that two Vice Presidents together with a President are essential. The two Vice Presidents are assigned the responsibility of two of the committees and are thereby working officers, not figure heads. Rotation in office is important.

3. Monthly programs must be varied in order to effectively bring to the attention of both small and large firms various safety topics. These programs are both educational and inspiring and range from out-of-town speakers to panel type discussions. Typical topics have been "Electrical Hazards," "Dangerous Gases," "Fire Extinguishers," "First Aid," etc.

The Program Committee has tried designating special monthly meetings as "Industrial Nurses and First Aid Personnel Day" or "Top Management Night." The latter affair has become an annual event in the short time that we have been organized. This is the only dinner meeting held and a speaker of national prominence is secured to give both the bosses and their safety men a chance to get together.

The Education and Training Committee tries, through various means, to inculcate to our members the various ways safety can

—To page 98



Part of a group at the Western Electric Co., Inc., Laureldale Plant, learn how to apply the back pressure, arm-lift method of artificial respiration.



Safety precautions include learning the "know-how" of first aid. Here, four employees of Western Electric's Laureldale Plant learn chest and shoulder bandage methods.

YOU PAY DEARLY

FOR DIRTY GLASSES



Keep them clean. Like dim lights and dull tools, dirty glasses are dangerous and inefficient. And what's the remedy for dirty glasses? SIGHT SAVER tissues. They're known and used by millions of people as the quickest and easiest way to clean and polish eyeglasses. They're properly treated with the right kind of SILICONE to quickly wipe away the best excuse men give for not wearing safety glasses.

- Supplement your eye safety program.
- Reduce accidents and rejects caused by grimy glasses.
- Improve morale.

SIGHT SAVER cleaning stations
install

FOR WET OR OIL SOAKED FEET

Keep them dry. SHOE SAVER is a durable, water repellent SILICONE treatment that keeps water and oil from penetrating the leather and yet allows leather to breathe! It therefore reduces medical care traceable to contact dermatitis or wet feet. And by keeping leather soft and pliable, SHOE SAVER makes shoes more comfortable to wear • makes shoes last longer • improves morale • cuts overhead.



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from leading Safety Supply Houses

SIGHT SAVER DISPENSERS
Cat. No. 60 (Black) No. 61
(White) No. 62 (Safety Green)
\$2.50
Refill Packets (Cat. No. 65) \$1.45

SHOE SAVER
Cat. No. 81 (Pints, \$2.00, Quarts,
\$3.75, Gallons, \$12.75) Cat. No.
82 (4 ounce bottles, \$0.60)

**DOW CORNING CORPORATION, Dept. DZ-17,
Midland, Mich.**

Please send me your complete listing of sources of supply
for SIGHT SAVER Cleaning Stations and SHOE SAVER.

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FIRST IN
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CORPORATION**

MIDLAND, MICHIGAN

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DRY CHEMICAL EXTINGUISHERS

Reach for Fyr-Fyter Dry Chemical Extinguishers . . . with absolute assurance of protection performance! They're engineered to **PERFORM** with "Sealed-In" power that's harnessed in perfected air-tight, water-tight sealing to provide fast, positive, fire-fighting action . . . **without fail!** The simple, squeeze-grip nozzle control releases a thrust of force that's **SURE** . . . expelling a long-range, heat-shielding, flame-smothering stream of free-flowing chemical powder. On contact, the flame-smothering powder puts out fires in gasoline, petroleum products, paint, varnish, lacquer, turpentine, alcohol . . . **all flammable liquids, gas, butane, propane, chemical and electrical fires!** Stainless steel tank and aluminum castings provide extra strength for more rugged use, and less weight for easier handling.

For assured protection performance . . . be **SURE** with an Underwriters' Approved Fyr-Fyter Dry Chemical Extinguisher!

WRITE ON YOUR LETTERHEAD FOR FULL DETAILS TODAY!

FF-5

The Fyr-Fyter Co.

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REPRESENTATIVES IN PRINCIPAL CITIES

BRANCH OFFICES: New York, Boston, Philadelphia, Chicago, Atlanta, Dallas, San Francisco, Portland, Seattle.

Safety Films Win National Awards

AWARDS to motion pictures and sound slidefilms produced during 1953 have been announced by the National Committee on Films for Safety.

The committee, which represents 22 national organizations, makes annual awards for outstanding films in the fields of traffic, occupational, home and general safety. The objective of the committee is to promote public knowledge of accident prevention measures through visual means.

Among the occupational motion pictures, the plaque was awarded to "Escape from Limbo," produced by Unifilms, Inc., for the Pennsylvania Railroad.

Award of Merit certificates were awarded to:

"The Gamblers," produced by the Calvin Company for Caterpillar Tractor Company.

"Horse Sense," produced by the U. S. Forest Service for its own program.

"It Didn't Have to Happen," produced by Crawley Films, Limited, for Industrial Accident Prevention Associations, Toronto, Ontario.

Among the sound slidefilms, certificates of merit were awarded to:

"The Guy Behind Your Back," produced by Air Reduction Sales Company for its own use.

"Wrong Way Wldo," produced by Paragon Pictures, Inc., for Zurich-American Insurance Companies.

A complete listing of all contest entries may be obtained by writing to William Englander, secretary, National Committee on Films for Safety, 425 N. Michigan Ave., Chicago 11, Illinois.

Show to Feature Maintenance Methods

Solutions to a wide variety of industrial maintenance problems will be found among the methods and equipment application developments to be exhibited at the Western Plant Maintenance Show in the Los Angeles Pan Pacific Auditorium, July 13-14-15.

National Safety News, May, 1954



R.I.P.

control insects with **VAPOSECTOR!**



West Atomizing Equipment (portable or permanent) has exclusive suction spray nozzles that produce a "dry fog" with uniformly sized 8-micron VAPOSECTOR droplets. These nozzles use less insecticide, cover a wider area, produce a greater kill.

WEST DISINFECTING
Company

42-16 West Street, Long Island City 1, N. Y.
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Branches in principal cities

High-potency VAPOSECTOR is formulated for the realist who has an insect problem and wants to get rid of it — *fast!*

VAPOSECTOR is many times more concentrated than the standard grade AA spray — and over four times as economical in use. There's no danger of contamination or odor when used according to directions. It is non-corrosive and will not injure metals, finished surfaces or fabrics, when used as directed.

VAPOSECTOR controls insects by "double penetration." When used with West atomizing equipment, it becomes a "dry fog" that reaches and penetrates hiding places, and then penetrates the insect's outer covering for a permanent kill. Insects have no place to hide, no time to escape. Demonstrations have revealed dead insects in numbers never thought possible.

West can supply VAPOSECTOR, special mill sprays and fumigants, residual and contact insecticides, spraying equipment — or a *complete insect control program tailored to fit your needs!*

WANT DETAILS?

Tear out this coupon and mail it with your letterhead.

☐ I'd like a FREE copy of West's 36-page booklet on INSECT CONTROL.

☐ I'd like to talk to a West representative about INSECT CONTROL — without obligation.

Dept. 7



don't slip up on Safety



Slips are costly . . . and far too frequent. In fact, they cause one in six of all disabling accidents. You don't have to put up with greasy, oily, hazardous floors. The cure is simple . . . and economical. For safety underfoot, use easy-to-apply Fera-Mat or Ferrox floor coverings.

FERA-MAT facts

- Peel it...roll it...and walk on it in safety.
- Comes in 6" x 24" cleats that are ideal for stairs.
- Covers large floor areas quickly... cuts costs.
- Goes down on any clean surface... and stays there.
- Diamond-hard surface, yet easy to clean.



FERROX facts

- Open the can...trowel it on... say so-long to slips.
- Perfectly suited for machine areas and uneven surfaces.
- Gives excellent coverage...40 square feet to gallon.
- Really sticks...resists oil, chemicals and weather conditions.
- Costs 1/3 as much as fabric-backed floor coverings.



AB-100

Take your choice of either FERA-MAT or FERROX, depending on your plant conditions. Look into American Abrasive's line of non-slip treads, plates and gratings. *Fact Folder on Safety Floorings* contains data on Fera-Mat, Ferrox, Fera-Flow, Feralun, Bronzalun, Alomalun. Send for your copy.

AMERICAN ABRASIVE Safety Floorings

AMERICAN ABRASIVE METALS CO. • IRVINGTON II, N. J.

Safety Sign Proves Attention Getter

EMPLOYEES of the Windsor Works of the Canadian Salt Company, Ltd., are reminded of the importance of safety by the sign in the accompanying illustration. It is located near the plant entrance.



The sign, built by Windsor's maintenance department, has a removable panel in the center which is used for posters. They are changed every three or four weeks.

At the bottom of the sign the number of days since the last lost time accident is posted daily. It was found that this helps keep up the interest of the employees, and makes them more safety conscious.

Berks County

—From page 94

be brought to the attention of their employees. This committee has made surveys to determine what help is desired. It has established a film library in the Association's office for use by member firms. This has been a big help to such firms as Boyertown Burial Casket Co. who stated through their vice president and general manager, L. R. Derr, "We believe that the Accident Prevention and Health Group . . . has benefited us in several ways . . . especially the audio slide films on 'Personal Side of Safety.'"

The Membership and Attendance Committee has the sole responsibility of securing as high attendance as possible at our monthly meetings. As evidence that their work has been successful is a recent tabulation showing a 43.4 average representing 23 member firms.

Plans are already being made to



B R E C K

H A N D C L E A N E R

Breck Hand Cleaner is an efficient, heavy-duty cleaner which is non-irritating and contains no abrasive materials. Breck Hand Cleaner cleans without lathering, and because of its mild yet thorough cleaning action aids in the prevention of skin irritation. About a teaspoonful of Breck Hand Cleaner is applied, without water, to the hands and arms and rubbed in well, followed by thorough rinsing. The excellent penetrating action of Breck Hand Cleaner loosens dirt, grime, and other soils and permits their easy removal in the rinse. Breck Hand Cleaner is formulated to rinse equally well in both hard and soft water. Breck Hand Cleaner has been found especially useful in helping to remove oil, grease, dirt, dust, grime, paint and other soils from the skin.



A Breck Industrial Preparations Booklet will be forwarded to you upon request.

JOHN H. BRECK INC. • MANUFACTURING CHEMISTS • SPRINGFIELD 3, MASSACHUSETTS
NEW YORK • CHICAGO • SAN FRANCISCO • OTTAWA CANADA

EYE WASHING FOUNTAIN



SAVE EYES!



Leading industrial doctors advise immediate washing with plenty of running water as the best first aid treatment for any chemical in the eyes. Records prove that washing with water for ten minutes or more, close to the accident, is necessary to reduce or eliminate eye damage.

Forehead operation leaves hands free to open eyelids so water can be directed wherever chemicals might be lodged. Sanitary white baked enamel bowl is resistant to most fumes.

Over 500 industrial plant installations have been made to date.

Write For Details.

VALVE
Chain Operated
Quick Action
Self-Closing

NEW EMERGENCY SHOWER



Deluge of Water
30 to 40
G.P.M.

The B & A Shower is the quickest and most satisfactory way to saturate a worker with gallons of water the instant an accident occurs, to prevent a disfiguring burn—even a fatality.

Special shower head, no holes to clog—can be used where unfiltered water prevails.

Write For Details.

GLASS SLIVERS
AND CHEMICAL
IN EYES!

DISFIGURING
FACIAL CUTS!
AND BURNS!

CUTS AND
CHEMICAL BURNS
ON ARMS
AND BODY!

THIS HAPPENS
WHEN
UNPROTECTED
GLASS BOTTLES
ARE BUMPED



5 PINT
1 GALLON
5 GALLON

are widely used for the safe handling of glass bottles containing harmful chemicals; also the storage and recovery of expensive serums, biologicals, and other costly products.

Painful cuts, disfiguring burns, loss of eyesight, or even a fatality, do result from corrosive liquid splash and flying glass when unprotected bottles shatter.

Write For Details.

BENSON & ASSOCIATES, INC.

P. O. Box 7542, Dept. N.S., Chicago 80, Ill.

increase this participation by the use of greater top management support. In fact, Harry S. Wolfe, personnel manager, Orr & Sem-bower, Inc., feels the importance of attendance when he states, "... this group has awakened in all of us here an awareness of safety." He continues by saying, "... it has paved the way for the formation of a joint management-employee safety committee which in turn has made it possible for us to gain acceptance, by employees, of safety practices formerly resisted."

Publicity is always essential and through the cooperation of our 2 local newspapers the Publicity Committee of the Accident Prevention and Health Group has been able to bring to the attention of Berks County in general the work of the Association in this vital life-saving project. This has in many instances counteracted the tendency of the public in general to assume industry is not doing its part and has made it increasingly difficult for those outside of industry to make this claim valid.

Realizing the immensity of this project, Paul Hafer, president of the Association, has instituted during his term of office a newly formed Safety Committee with Thomas A. Willson, Sr., president, Willson Products, Inc., a manufacturer of eye and respiratory safety equipment, to assist and advise the Accident Prevention and Health Group in its work. This new committee will with its top management men be the guiding hand during 1954. Recently this committee met with the Executive Committee for the group and went over the progress to date in order to evaluate what plans are necessary for future progress.

No story about safety would be complete without recognizing the invaluable assistance and encouragement given to us by the Small Business and Associations Committee of the National Safety Council. We have called upon them many times both before and after we joined as an Association. Through its capable director, Al Baltzer, material and advice are constantly keeping us on the road to "A better and safer Berks County."

Pioneer Local Council

—From page 23

cil then set up a School Safety Council.

In the very beginning of the Lehigh Valley Safety Council the firms most interested and most responsible for its success besides those mentioned in its first slate of officers, were: Lehigh Valley Traction Company, Pennsylvania Power & Light Company, Metropolitan Edison Company, Lehigh Portland Cement Company, Allentown-Bethlehem Gas Company, and Lehigh Structural Steel Company. A little later came along the Bethlehem Fabricators, Inc., and the following cement manufacturers: Alpha Portland Cement Company, Coplay Cement Company, Dragon Cement Company, Giant Portland Cement Company, Hercules Cement Company, Keystone Portland Cement Company, Lone Star Cement Corporation, National Portland Cement Company, Nazareth Cement Company, Penn-Dixie Cement Corporation, Universal Atlas Cement Company, and Whitehall Cement Manufacturing Company. When the council decided to expand into Warren County in New Jersey the Ingersoll-Rand Company was the first firm to join. Later came some of the coal operators, railroads, and many of the smaller industries of diversified character.

In 1923 the Lehigh Valley Safety Council was responsible for an innovation which has had tremendous influence on the entire safety movement. Then radio was in its commercial infancy, yet E. C. Spring of the Lehigh Valley Traction Company, president of the council, arranged for a series of safety broadcasts. The first sponsor was the traction company. Then later the program developed into a daily talk given by the Secretary of the council and sponsored by the council itself.

There are many interesting sidelights concerning the council's radio activities. In 1937 when David Adam assumed the office of secretary-treasurer of the council, he took up the work of conducting the daily radio talk. He soon was known as "Uncle Dave" and his broadcasts became very

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JUST OUT—"Foam Fire Protection," illustrated booklet on what foam is, what it does, how it works. Yours free.



EVERY BATCH of AER-O-FOAM is tested on actual petroleum or polar-solvents fires before it is offered to you. Each phase of the performance is checked—such as extinguishment time, foam volume and sealability.

AER-O-FOAM's tough blanket of tiny air-filled bubbles smothers and cools fire at the same time. What's more, it can be used to insulate surrounding property and equipment against fire damage. Write for data on AER-O-FOAM (for petroleum fires) and AER-O-FOAM "99" (for polar-solvent or petroleum fires). When you need foam fire protection, you need fire-tested AER-O-FOAM protection.

NATIONAL

FOAM SYSTEM INCORPORATED

Headquarters for Foam Fire Protection — WEST CHESTER, PA.

NEW

DOOR CATALOG

IDEAS

FULL OF FACTS



HANDY

HELPFUL

You'll have full information on cost-cutting doors for every need in this new 1954 Kinnear catalog.

It gives you full, up-to-the-minute information on how to save maximum space, cut costs, boost efficiency and get more protection at doorways in old or new buildings. In addition to complete data on Kinnear Steel Rolling Doors—the doors with the famous, *Kinnear-originated* curtain of interlocking steel slats—it tells all about Kinnear Steel Rolling Fire Doors, sectional-type Kinnear RôL-TOP Doors, and the protective Kinnear Steel Rolling Grilles. Write for your **FREE** copy **TODAY!**

SAVING WAYS IN DOORWAYS

KINNEAR
ROLLING DOORS

The KINNEAR
Manufacturing Company

FACTORIES: { 1720-40 Fields Ave., Columbus 16, Ohio
1742 Yosemite Ave., San Francisco 24, Calif.

Offices and Agents in Principal Cities

popular, so much so that the radio station took him on as a full-time announcer. The council continued to sponsor the safety radio program, changing from morning to evening and contracting for a big broadcast every Thursday evening at 6:45. Uncle Dave continued for nine years as the main character in this pioneer safety radio broadcast.

Uncle Dave Adam passed away in 1946, mourned throughout the Lehigh Valley. During his years of radio work he had enlisted over 20,000 boys and girls in his ABC Club, the letters standing for "Always Be Careful." He had established a Junior Safety Council-of-the-Air and through it had sewn the seeds of safety in the hearts and minds of many thousands in the area.

Shortly after the passing of Uncle Dave Adam the council discontinued sponsoring radio time, because then firms began to clamor for the right to advertise their products in connection with safety programs. Today, in the Lehigh Valley, there are nine radio stations and two television stations. Most of these stations have at least one safety program on their regular schedules, sponsored by local merchants. Some of the stations have two different safety programs running right through the year.

Four Types of Memberships

Today the Lehigh Valley Safety Council has over 80 industrial member firms in addition to individual, association, and community members. The council has these four types of memberships so that everyone interested in safety may join. The individual membership is for anyone interested in the movement; the association membership is for trade associations, chambers of commerce, civic organizations, and clubs; the community membership is for institutions, radio and television stations, newspapers, hospitals, and schools. The industrial membership, of course, applies to all other commercial firms.

After 40 years, the early days when the first sections of the council were set up seems a long way back. Today the council has an executive committee consisting of

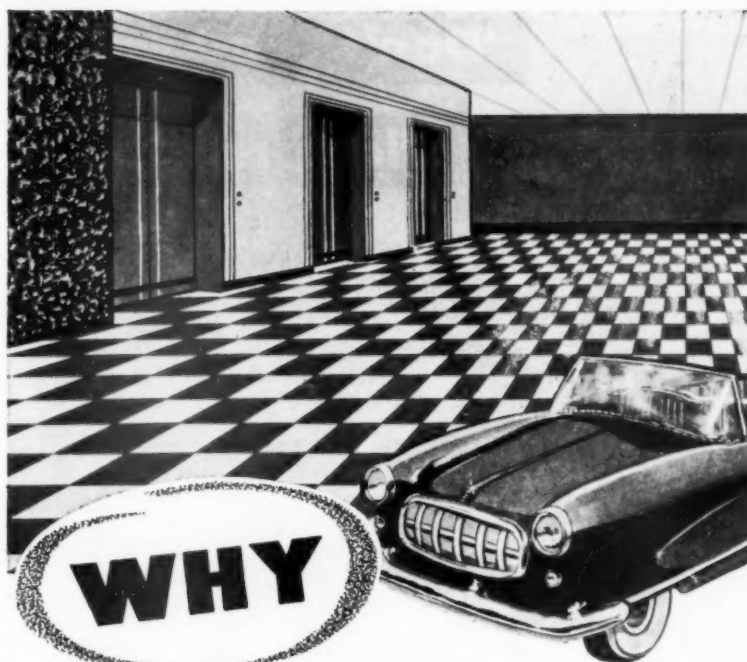
37 people, a well-staffed office, and seven divisions (each in charge of a vice-president). The divisions are: Industrial, Home, School, Farm, Traffic, Women's, and Civil Defense. Now, the council operates in every phase of safety. Its budget in traffic accident prevention alone is many times what its total budget was only 20 years ago. It has several periodical publications, produces many pamphlets, books, and posters. It conducts the Annual Eastern Pennsylvania Safety Conference, which this year is its 27th. The 1954 Conference is made up of 12 sessions with 30 speakers, all in one day. Over three thousand people take part in the program. The Annual Banquet draws between eight hundred and a thousand.

The Lehigh Valley Safety Council serves five counties in Pennsylvania: Bucks, Lehigh, Monroe, and Northampton; one county in New Jersey, Warren. The area serviced is one of the prime industrial areas in the world with a population of over 600,000. The industrial member firms of the council have over 65,000 employees. Down through the years the main support of the council financially has come from Bethlehem Steel Company, New Jersey Zinc Company, the 13 cement manufacturers located in the area, public utilities, and the many diversified industries of the locality.

The list of past presidents and directors of the Council reads like a Who's Who of American Industry. Some of the great leaders of the steel, cement, railroad, and public utility businesses have been connected with the council in its great work to keep making the Lehigh Valley area a safe place to live, work, and play.

First Ship Safety Award Presented

The first Ship Safety Award of the Marine Section, National Safety Council, was presented April 12, in New York by Louis S. Rothschild, chairman of the Federal Maritime Board. Intended for annual presentation to the freighter, liner and tanker credited with the year's outstanding safety achievement at sea in each of those cate-



a large automotive company picked **LEGGE** safety polishes to maintain its floors

Searching for a polish to maintain its resilient floors, one of the world's largest automotive manufacturers tested dozens of products.

The Plant Engineering department chose a LEGGE Polish, basing its decision on *slip-resistance*, *economy* and *appearance*. Challenged by Purchasing on the question of economy, Plant Engineering agreed to a further test of a competitive product which cost roughly *half* the price of the LEGGE Polish.

A 55 gallon drum of each was applied to floor areas which were similar in every respect. After a week or two, little difference could be detected. But within a month, the competitive polish had been virtually "walked off" the floor. The LEGGE Polish functioned perfectly with no loss of slip-resistance or rich appearance for *more than 4 months!*

As a result of this tremendous saving in materials and labor, LEGGE Polishes are now used exclusively throughout the plant.

"Mr. Higby Learned about Floor Safety—the Hard Way!"

This eye-opening Free booklet tells you how LEGGE Safety Polishes reduce slip-accidents by up to 98%, cut maintenance costs to the bone. Explains the extra dividends you get in the free services of a trained LEGGE Safety Engineer. Clip coupon today.

Walter G. Legge Company, Inc.
101 Park Ave., New York 17, N. Y.

Gentlemen:

- ☐ Send me your FREE booklet, "Mr. Higby Learned about Floor Safety . . . the hard way!"
- ☐ Have a LEGGE Safety Engineer call to examine my floors. No charge or obligation to me.

Name _____

Firm _____

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City _____ Zone _____ State _____

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"Don't send me

flowers, Boss..



**"Just put some Anti-Slip Cosmolite
on those slippery floors!"**



**WRITE FOR
FREE BOOKLET**

NOW you can "cure" those slippery floor problems without special products or costly extra labor. New Anti-Slip Cosmolite does the job in jig time. Protects against floor damage as well as accidents. It's applied quickly like an ordinary self-shining wax. Dries bright and stays that way. Eliminates unnecessary buffing. Resists water spotting. Try it now. Sample sent to you on request.

Anti-Slip Cosmolite Wax



HUNTINGTON LABORATORIES, INC.
Huntington, Indiana • Toronto, Canada



**What Is He Using to
Prevent Serious Injury?**

The Prescott Safety Tool

Those who have been using dangerous, old-fashioned hand, foot and bar methods of closing hopper bottom car doors with latch-type locks should be provided with this protective tool. It will prevent many ruptures, strained backs, and smashed fingers. Write today for free folder.

The Trumbull Mfg. Company
WARREN, OHIO

gories, the award consists of a pennant and certificate for the ship, plus certificates for each officer and crew member.

This year's cargo-ship award went to three Great Lakes bulk freighters of the Pittsburgh Steamship Division, U. S. Steel Corporation, for their participation in the rescue last year of 14 crewmen from the ore carrier *Henry Steinbrenner*, which had foundered in Lake Superior in one of the most violent storms of recent history.

Working in coordination with one another and with two ships of other companies, they swept the wreck area, despite mountainous seas and gale winds. While the *Corey* discharged oil to make a slick, the *Clemson* picked up seven living men and four bodies. Then, joining with the *Kerr*, which had steamed to the scene from the greatest distance, they combed the lake to find any survivors who had been missed.

The award was accepted by David L. Buchanan, industrial relations manager, Pittsburgh Steamship Division, United States Steel Corp., in behalf of Donald C. Potts, president of the Pittsburgh Steamship Division.

Wire from Washington

—From page 38

street. In attempting to restrain the child from stepping into the street, the teacher tripped and fell and sustained an injury. The Board ruled that at the time of her injury, the teacher was performing an act incidental to her employment and was therefore entitled to compensation benefits. (*In the Matter of Simonds*)

Motor Vehicles

H.R. 8521 (Multer) would allow any state to enact laws to penalize, prohibit or discourage operation within its borders of any motor vehicle owned by a non-resident who has not complied with that state's requirements as to insurance, inspection, and safe maintenance requirements. This bill is intended to apply to temporary operation within or through a state.

H.R. 3203 (Wolverton) which has been passed by the House, is scheduled for hearings before the

Senate Committee on Interstate and Foreign Commerce on May 10. This bill, some of the safety provisions of which have already been put into effect by the Interstate Commerce Commission, is discussed in the *Wire from Washington* for February.

Home Safety

H.R. 8418 (O'Hara) would amend the Federal Food, Drug and Cosmetic Act to prohibit the use in food of new chemical additives which have not been adequately tested to establish their safety.

Distinguished Service

—From page 58

Inland Steel Container Co., New Orleans (La.) Plant.

International Business Machines, Inc., Poughkeepsie, N. Y., Plant No. 2.

Keebler-Weyl Baking Co., Philadelphia, Pa., United Biscuit Co., Chicago Plant.

Kennecott Copper Corp., Garfield, Utah, Arthier Plant.

Walter Kidde & Co., Inc., Belleville, N. J. (Entire company).

Linde Air Products Co., Newark (N. J.) Plant.

Mathieson Chemical Corp., Baltimore (Md.) Operations.

Niagara Falls (N. Y.) Plant.

F. H. McGraw & Co., AEC Project, Paducah Area, Ky.

Merck & Co., Inc., Rahway, N. J. (Entire company).

—Rahway Plant.

Mersey Paper Co., Ltd., Liverpool, Nova Scotia Mill.

Morgan Co., Oshkosh, Wis. (Entire company).

National Container Corporation of Michigan, Ontonagon, (Mich.) Unit.

Nephra Chemical Co., Inc., Harrison (N. Y.) Production Division.

Norfolk and Western Railway Co., Roanoke (Va.) Shops.

Northwest Airlines, Inc., St. Paul, Minn., Line Maintenance and Base Repair Shops—Systemwide.

Oswego Falls Corp., Fulton, (N. Y.) Plant.

Pabst Brewing Co., Milwaukee (Wis.) Plant.

Philco Corp., Philadelphia, Pa., Radio, Television Division.

Procter & Gamble Co., Ivorydale, Ohio (Entire company).

—Dallas (Texas) Plant.

—Milan (Tenn.) Arsenal.

Publishers Paper Co., Oregon City, Ore. (Entire company).

The Quaker Oats Co., Sherman (Texas) Mill.

Quebec Iron and Titanium Corp., Quebec, Canada (Entire company).

Schmidt & Ault Paper Co., York, Pa. (Entire company).

—To page 107



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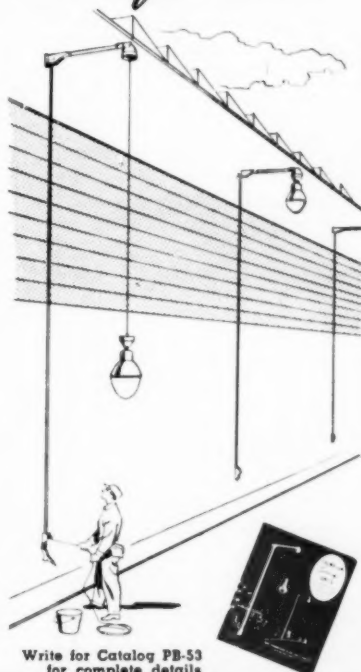
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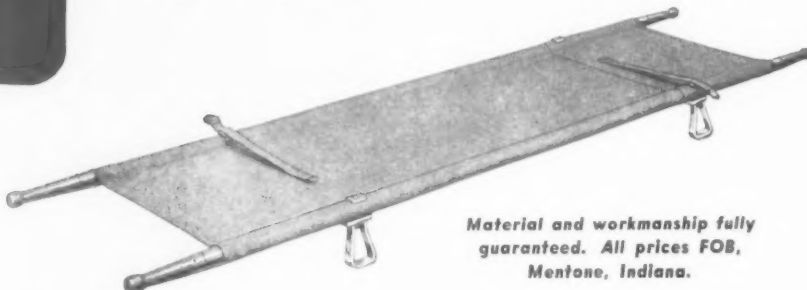
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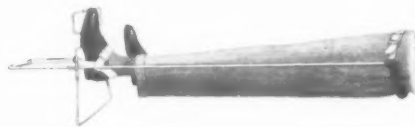
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MONTREAL, CANADA

Distinguished Service

—From page 105

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 St. Joseph Lead Co., Monaca, Pa., Josephstown (Pa.) Smelter.
 St. Regis Paper Co., Kalamazoo (Mich.) Plant.
 Sonoco Products Co., Hartsville, S. C. (Entire company).
 Stockham Valves and Fittings, Birmingham, Ala. (Entire company).
 Tennessee Copper Co., Copperhill, Tenn. (Entire company).
 Trans World Airlines, Inc., Kansas City, Mo., Flight Division.
 United States Coast Guard Yard, Baltimore, Md.
 United States Government Printing Office, Washington, D. C.
 United States Gypsum Co., Gypsum, (Ohio) Plant.
 United States Steel Corp., Pittsburgh, Pa., All Steel-Producing Units.
 State of Washington Dept. of Highways, Olympia, Wash.
 Westinghouse Electric Corp., Small Motor Division, Lima, Ohio.
 —Switchgear Division, East Pittsburgh, Pa.

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 Aluminum Company of Canada, Ltd., Arvida (Quebec) Plant.
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 American Cast Iron Pipe Co., Birmingham, Ala. (Entire company).
 American Enka Corp., Enka, (N. C.) Plant.
 American Hoist & Derrick Co., St. Paul, Minn. (Entire company).
 American Zinc Company of Illinois, Hillsboro (Ill.) Plant.
 Anglo-Newfoundland Development Co., Ltd., Grand Falls Plant.
 Auto-Soler Co., Atlanta, Ga. (Entire company).
 Avco Manufacturing Corp., Appliance and Electronics Division, Nashville, (Tenn.) Plant.
 Barnes Drill Co., Rockford, Ill., (Entire company).
 Behr-Manning Corp., Troy (N. Y.) Plant.
 Bethlehem Steel Co., Bethlehem Cornwall Corp., Cornwall Mines.
 —Bethlehem Mines Corp., Ellsworth Division.
 —Bethlehem Quarry Co., Bridgeport Quarry.
 —Hanover Quarry.
 —Fabricated Steel Construction, Alameda Works.
 —Fabricated Steel Construction, Erection Dept., Eastern Erection.
 —Shipbuilding Division, Staten Island Yard.
 Boston Gear Works, North Quincy, Mass. (Entire company).
 Briggs Manufacturing Co., Hamtramck (Mich.) Plant.

Buckeye Cotton Oil Co., Charlotte (N. C.) Plant.
 —Corinth (Miss.) Plant.
 —Louisville (Ky.) Plant.
 —Montgomery, (Ala.) Plant.
 —Uniontown (Ala.) Plant.
 Burroughs Corp., Detroit, Mich., Schaefer Plant.
 Canadian Industries, Ltd., Montreal, Canada, York Works.
 Canadian International Paper Co., Three Rivers (Quebec) Plant.
 J. I. Case Co., Rock Island (Ill.) Works.
 Carbide & Carbon Chemicals Co., Paducah (Ky.) Unit.
 Celanese Corporation of America, Bishop (Texas) Chemical Unit.
 —Burlington (N. C.) Unit.
 —Celee Plant, Narrows, Va.
 —Hopewell (Va.) Plant.
 —Summit (N. J.) Plant.
 Columbia Mills, Inc., Saginaw (Mich.) Factory.
 Consolidated Paper Corp., Ltd., Port Alfred Division, Grand'Mere, Quebec.
 —Laurentide Division.
 —Wayagamack Division.
 The Container Co., Reading, Pa. (Entire company).
 Continental Screw Co., New Bedford, Mass. (Entire company).
 The Crosse & Blackwell Co., Baltimore, Md. (Entire company).
 Crown Zellerbach Corp., Port Angeles (Wash.) Plant.
 Dan River Mills, Inc., Danville, Va. (Entire company).
 Diamond Alkali Co., Painesville (Ohio) Works.
 Dravo Corp., Pittsburgh, Pa., Machinery Division.
 The Duriron Co., Inc., Dayton, Ohio (Entire company).
 Electro Metallurgical Co., Ashtabula (Ohio) Plant.
 The Esterbrook Pen Co., Camden, N. J. (Entire company).
 Farley and Loesch Manufacturing Co., Dubuque, Iowa (Entire company).
 Ferro Corp., Cleveland (Ohio) Plant.
 The Firestone Tire and Rubber Co., Akron (Ohio) Mechanical Shop.
 —Akron Plant No. 2.
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 Gardner Machine Co., Beloit, Wis. (Entire company).
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 General Electric Co., Cleveland, Ohio, Lexington Lamp Works.
 —Memphis, (Tenn.) Lamp Works.
 —Pitney Glass Works, Cleveland, Ohio.
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Linde Air Products Co., Essington (Pa.) Plant.
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- General Electric Co., Nela Lamp Works, Cleveland, Ohio.
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- Glass Technology Laboratory, Cleveland.
- Bucyrus (Ohio) Glass Works.
- Chemical Products Works, Cleveland.
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- Cadillac (Mich.) Plant.
- Alfred Hale Rubber Co., Inc., North Quincy, Mass. (Entire company).
- Humphreys Gold Corp., Starke, Fla., Trail Ridge Plant.
- Ideal Industries, Inc., Sycamore (Ill.) Unit.
- James Manufacturing Co., Fort Atkinson, Wis., Plant No. 1.
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 —Kimble Glass Co., Plant No. 35.
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 —San Francisco General Office.
 Pacific Coast Aggregates, Inc., San Francisco, Calif., Centerville Plant No. 106.
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 —Crete Mining Co., Albany Open Pit.
 —Erie Laboratory, Erie Mining Co.
 —Mahnomon Mine, Guyana Ore Co.
 —Rabbit Lake Mine, Youngstown Mines Corp.
 The Procter & Gamble Co., Macon (Ga.) Plant.
 —Portsmouth (Va.) Plant.
 Pressed Steel Car Co., Conduit Fittings Division, Chicago, Ill.
 The Quaker Oats Co., Chattanooga (Tenn.) Mill.
 —Depew, N. Y.
 —Tecumseh, Mich.
 Riegel Paper Corp., Riegelsville (N.J.) Mill.
 Joseph E. Seagram & Sons, Inc., Blair Distilling Co., St. Francis, Ky.
 —The Calvert Distilling Co., Lawrenceburg, Ky.
 —Hunter-Wilson Distilling Co., Gwynnbrook, Md.
 —Old Farmers' Distillery, Athertonville, Ky.
 Sherman Products, Inc., Royal Oak, Mich. (Entire company).
 Smith Brothers, Inc., Poughkeepsie, N. Y., Plant No. 1.
 Smith-Douglass Co., Inc., Danville (Va.) Unit.

—Next page

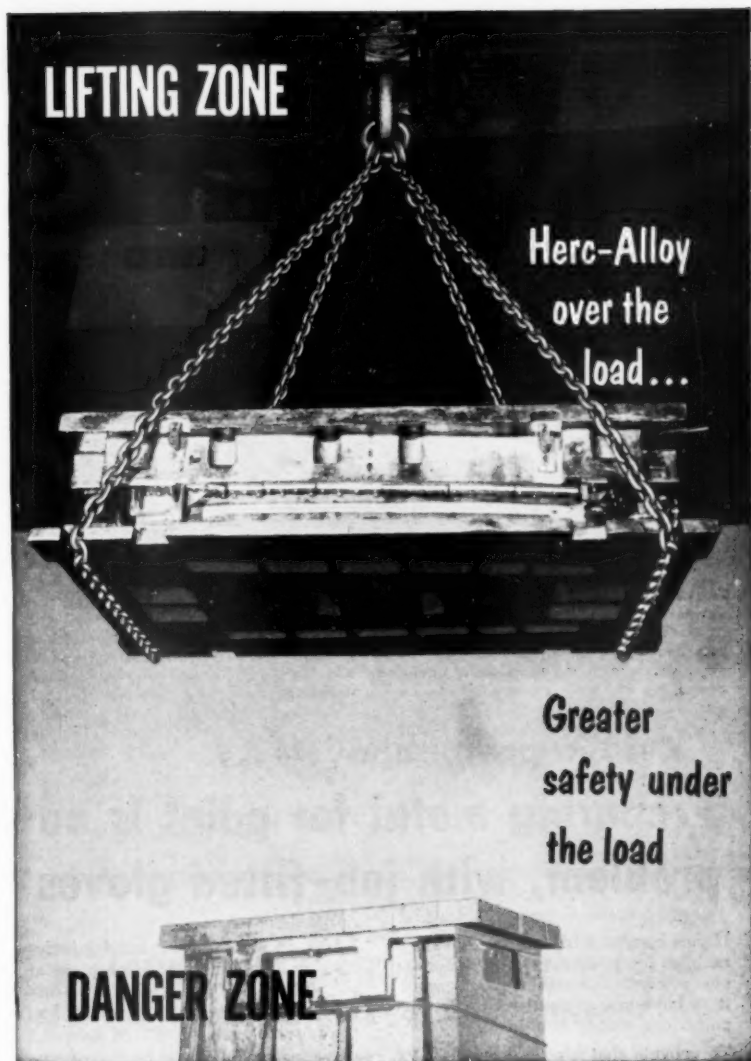


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On big power shovels... Preparing metal for paint is no problem, with job-fitted gloves

If you bought a big power shovel or mobile crane, to work outdoors in every kind of weather, you'd want it to have one of the best protective paint jobs money could buy.

To provide that kind of paint job on its famous "Lorain" cranes and shovels, The Thew Shovel Company pre-treats its fabricated sections with acid, which insures a strong bond for the paint.

The problem of handling the sharp-edged sheets and plates in the acid,

8 hours a day, without hand injuries or skin irritations, is no problem at all. For years, Thew's safety-and-cost-conscious management has standardized on job-fitted Edmont gloves. The glove used on this operation is coated with cut-resistant, acid-proof NEOX. It has a good grip, is flexible and comfortable to wear. As always, this job-fitted glove has minimized costs through longer wear, better work handling, greater safety and resulting employee satisfaction.



NEOX, natural rubber Over-all coated or palm and plastic coatings coated—34 types

Free Test Offer: We are interested in helping you fit the correct gloves to your jobs. Send a brief description, on your business letterhead, of your operation, materials handled and temperature conditions. Without cost we will recommend and forward samples of gloves, for job-testing. Our laboratory also develops special gloves for conditions which our 34 standard types do not meet. Address

Edmont Manufacturing Company, 1205 Walnut Street, Coshocton, Ohio

World's largest maker of coated industrial gloves,
available through all leading industrial suppliers.

Edmont

job-fitted gloves



—Smith-Rowland Co., Norfolk, Va.
—Southern Fertilizer & Chemical Co., Savannah, Ga., Hutchinson Island Plant.
—Southern Railway System, Washington, D. C., Asheville Shop.
—New Orleans Shop.
—Spartan Grain & Mill Co., Spartanburg, S. C., Newberry Mill.
—Spaulding Fibre Co., Inc., Milton (N. H.) Unit.
—Stauffer Chemical Co., Brooklyn (N. Y.) Unit.
—Engineering Dept., Chauncey, N. Y.
—Freeport, Texas.
—Hammond, Ind.
—Harvey, La.
—Monongahela, Pa.
—Roanoke, Va.
—St. Regis Paper Company of Canada, Ltd., Vancouver, B. C.
—Tennessee Products & Chemical Corp., Coke Plant, Chattanooga, Tenn.
—Texon, Inc., Carew Manufacturing Co., South Hadley Falls, Mass.
—Thilmary Pulp & Paper Co., Kaukauna, Wis., Bag Mill (R-43).
—The United States Printing and Lithograph Co., St. Charles Division, Cincinnati, Ohio.
—United States Vanadium Co., Grand Junction (Colo.) Warehouse and Shop.
—University of Akron, Government Laboratory, Akron, Ohio.
—Vulcanized Rubber & Plastics Co., Morrisville, Pa. (Entire company).
—Walworth Co., East St. Louis (Ill.) Foundry.

Announce Conference on Occupational Vision

The Third Rutgers Conference on Occupational Vision, November 16, 1954, in New Brunswick, N. J., will feature ocular efficiency according to Dr. John R. Wittekind, O.D., conference chairman.

The problem of industrial seeing conditions and demands, the costs of inefficient vision, the techniques involved in accelerating perception and comprehension, and organizing and maintaining a modern vision program are among the main subjects for discussion.

Speaking on these topics will be Glen Fry, D.D., Ph.D., director of the School of Optometry of Ohio State University; Henry Hofstetter, O.D., Ph.D., director of the Division of Optometry, Indiana University; Eugene Freeman, O.D., Ph.D., dean of the Chicago College of Optometry; and Richard Fienberg, O.D., Ph.D., president of Northern Illinois College of Optometry.

Advance registrations may be made with Prof. Maurice A. Chaffee, Director, Rutgers University Extension Division, 77 Hamilton Street, New Brunswick, N. J.

Imitation of Wisdom

—From page 31

rying about. But that's the sort of thing he ought to learn first and he can do it with a minimum of supervision from me.

Wednesday, May 5, 1954.

My new boy, Dick Hart, has just come into the office with a clip board full of inspection findings. He is sitting at his typewriter blocking out the first page of his report. I'm letting him run just as the old boss let me run.

Now it is almost time for me to push aside the work I'm pretending to be doing and thunder out words, "Just what in blazes are you working on?"

I sometimes wonder two things: *Is there anything new in safety work? And who pulled this act the first time on my old boss?*

Checklists

—From page 35

to reduce the number of checklists. This is only in the interest of economy of duplicating and shouldn't go too far.

Don't ask the users to make more than one copy, theirs, which should be punched and kept in a notebook on or near the user's desk. It will serve as a reminder to check as to completion of changes or repairs requested. The checklist, when used this way, is an excellent conscience-in-writing. It will never fail him if he'll only look at it from time to time.

Where does the boss come in? When he makes his rounds, he asks to see the checklist notebook. His asking to see it is its life-blood, it will also add to his satisfaction to be sure that all hazardous conditions and work-habits are known and that only the unforeseeable ones are unknown. He'll like that. So, ask him to keep it alive.

Once a year, ordinarily, oftener if your processes are changed frequently, go over each checklist as critically as you can and see that it is promptly revised.

One valuable by-product is that the next-in-line boys will very quickly use any of their spare minutes to check their departments also, and that's really good.

Checklists can be crutches, sure;

Again ZORBALL proves to be best floor absorbent!



C. E. Brown, superintendent of Base Services, Pacific Airmotive Corp., Chino, Calif., prefers WYANDOTTE ZORBALL to any other floor absorbent. Here, in his own words, are his reasons—



Skidproof, nonflammable ZORBALL being spread over oil spillage at Pacific Airmotive Corp.

"Zorbball is preferred over competitive products at P. A. C. because:

- ① It does not track thru the hangar and aircraft during work process.
- ② Clean, easy to handle.
- ③ Better absorbent qualities. Requires only *one* sweeping to effectively pick up oil and grease, as opposed to two sweepings with competitive products.
- ④ Even in California rains, ZORBALL when wet doesn't stick to worker's shoes. Hence, doesn't track into aircraft."

Thank you, Mr. Brown. Oils, paints, chemicals, water—ZORBALL absorbs them all without mudding, caking or dusting. Even after hard use, or when saturated, ZORBALL remains skidproof . . . always nonflammable. Beyond doubt, WYANDOTTE ZORBALL is the safest, lowest use-cost all-purpose floor absorbent you can use!

Mail coupon today for data or free sample

Wyandotte Chemicals Corporation, Wyandotte, Michigan

Send free data ☐
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of skidproof,
nonflammable
ZORBALL

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Firm _____
Address _____
City _____ Zone _____ State _____

This world is full of lame ducks. But just as there are also many really good men, the really good checklist will help to make the right things happen at a heart-warming pace.

After you've given them a thorough on-the-job test and they have succeeded in generating enthusiastic long-pull accident-prevention effort on the part of lukewarm line supervision, you'll like checklists, too.

Inspect Those Chains!

—From page 33

sibly may be rendered unsafe for use by overloading, faulty rigging, etc. Alert, safety conscious personnel are the best insurance for preventing and detecting such damage to lifting equipment.

Frequency of complete inspection of the assembly by the control group should be determined by the type and frequency of usage. A chain assembly in hard, frequent

operation should be inspected more frequently than a similar assembly in light, intermittent duty. In any event, however, all assemblies should be inspected at least twice a year.

Cleaning of the chain to remove dirt and grease should be the prelude to any link by link inspection. Defects most commonly observed in such inspections are twisted or distorted links, nicked or gouged links, excessively worn areas, elongated links, and damaged attachments.

Twisted, bent, or stretched links frequently are found in an otherwise safe, usable sling, Figures 2 and 3. Such damage may result from improper rigging practices, such as unbalanced loading, failure to pad sharp corners or twisted and kinked chain. Defects of this type often are restricted to a relatively small area of the assembly.

Closely related to these defects are nicked or gouged links. Nicks and gouges may be put into the chain by unduly rough handling, dragging the chain across rough terrain, or by improper storage of assemblies not in service. Many surface scratches and nicks are not deep enough to impair safe operation although there always is the danger that these apparently minor defects may serve as effective stress risers.

During the course of normal reconditioning by the chain manufacturer, such areas will be removed to eliminate any such danger. Deep scratches or gouges that materially reduce the effective cross section of the chain material, Figure 4, can impair the safe working properties of the assembly. There is no established quantitative rule for determining the point at which a nick or gouge becomes a hazardous defect. It is common practice, however, to consider any notch-type defect which reduces the effective diameter of the material by 5 per cent as a definite hazard.

Under normal operating conditions where the chain is being used within the recommended working load limit, wear is concentrated at that point on the end of the link where the adjacent link bears. Excessive wear at these bearing points is a defect which may cause an apparently safe sling to be

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World's most famous—tops in safety. Weighs only 13 oz. Cool, comfortable, easily adjusted to any head size. Radiating ribs deflect rather than absorb blows.



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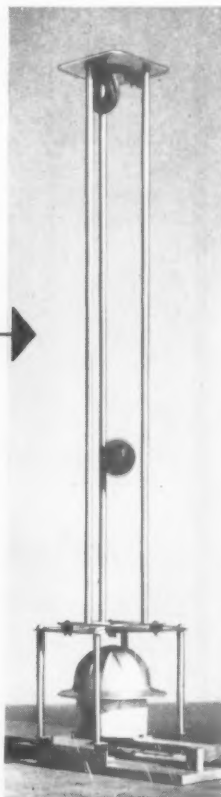


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8 lb. steel ball drops 5 ft. in Birnall Method of Testing which meets U.S. Government requirements.



Ball dents "T" hat and is deflected. Hat resists shock with no further damage.

classified as unsafe. Wear of this type, Figure 5, cannot be observed by casual inspection. These areas may be examined only by turning each individual link to an angle with the line of the chain and examining the bearing surface.

In all cases where the diameter of the chain material at the bearing point has been reduced by 10 per cent, the sling should be removed from service because the 10 per cent decrease in material diameter is accompanied by about a 20 per cent decrease in effective area. Such a worn assembly might be reclassified safely at the next smaller size, i.e., a worn $\frac{1}{2}$ -inch sling may be re-rated as an acceptable $\frac{3}{4}$ -inch assembly. This practice of reclassifying chain is not recommended, however, because of the attendant difficulty of keeping the worn $\frac{1}{2}$ -inch sling from being used as a safe $\frac{1}{2}$ -inch assembly.

Many lifting assemblies are made unsafe by damage to the chain attachments. Such damage frequently is the direct result of overloading. In the case of slip or grab hooks, this overloading may result from improper rigging and excessive stress of the point of the hook. Hooks are designed so that the bowl of the hook will withstand normal stresses. The point of a hook has possibly the lowest loading-bearing capacity of the attachment.

In their manufacture, each completed assembly made from alloy material, body chain and attachments, is tested under direct tension equal to at least twice the recommended working load limits. Iron chain assemblies are tested in a similar manner at loads substantially greater than their rated working load limit but not equal to twice the rated capacity. Such testing insures safe operation without impairing the natural ductility of wrought iron chain. In service, however, stresses may exceed the test values resulting in opened hooks, twisted hooks, deformed

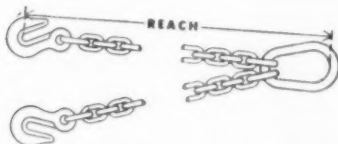


Fig. 7. Schematic explanation of the term "reach."



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Daily hand washing with VESTAL SDC forms an invisible but protective film on the skin. For SDC contains the antiseptic agent, Hexachlorophene, which remains on the skin after the hands are rinsed and dried. This antiseptic film provides a continuous barrier to infection and disease transmission—with complete skin safety.



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VESTAL INC. ST. LOUIS 10, MO.

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coupling links, etc. Slings with such damaged attachments, Figure 6, should be removed from service for more complete examination. Damage to attachments frequently is accompanied by equivalent damage to some or all of the body chain.

Uniform elongation of the chain cannot be detected during the link by link inspection unless the overloading has been sufficient to collapse the links causing them to bind. Loading beyond the yield point (elastic limit) of the chain causes the individual links to stretch. This stretching, in turn,

reduces the effective load-bearing area and markedly increases the stress on the cross section.

To check for possible excessive elongation (stretch) of the chain, the assembly should be laid out flat or hung free without load. The reach (distance between the top and bottom bearing surfaces) of the assembly should be measured as the final step in the periodic inspection, Figure 7. Overloading has occurred since the date of the previous inspection if the reach differs materially from the previously recorded values. The safe working properties of

sling equipment that has been overloaded are questionable. Such assemblies should be removed from service for further examination. Sling assemblies should be discarded in all cases where the uniform stretch of the assembly exceeds 5 per cent of the original length.*

Repairs and Reconditioning

The problem of repairing and reconditioning is very closely allied to the inspection program. The type of chain involved will determine, to a large measure the repair procedures.

Wrought iron chains frequently are repaired on-the-job using running lengths of new chain and one of the many types of connecting links available commercially. In addition to routine repairs, all wrought iron sling assemblies should be reconditioned by an annealing heat treatment at least twice a year. Annealing is essential to eliminate the dangerous effects of work hardening with subsequent material embrittlement

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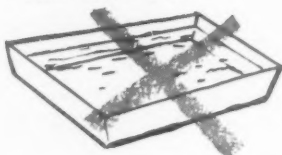


Don't Spread It

the old fashioned way!

THE NEW SANITARY WAY

THE OLD WAY



1. Step on
2. Mark time *That's all!*
3. Step off

Keep your employees' productivity up, and plant accidents down, by preventing the spread of Athlete's Foot fungi in your plant's shower room with the most sanitary foot protective device yet developed.

The SANI-MISTER Spray Dispenser provides a cooling, refreshing, full strength treatment for each user. SANI-MIST solution is individually dispensed from a sealed tank, preventing contamination or dilution by previously used solution or shower drippings. Workers prefer this personal, inviting method to ordinary foot baths or foot pads.

Laboratory tests show that SANI-MIST solution kills the principal fungi causing Athlete's Foot in less than 30 seconds. The SANI-MIST method costs only a few cents a day. For complete details, write TODAY!

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STOP THAT FALL



Safety Lifeline Lock FOR SCAFFOLDS AND SWINGS

Locks automatically, instantly. Slips onto ordinary rope lifeline. Moveable up or down with man. Instant locking position at all times, whether stationary or being moved up or down.

Snap into safety belt: No adjusting. Inexpensive. Overall length approx. 13". Does not harm rope. Weight: approx. 5 lbs. Send for folder

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Also Manufacturers: Safety Device for Ladders.



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that is characteristic of wrought iron chain. This annealing may be done by the chain manufacturer or by the user if he has adequate equipment. A satisfactory annealing cycle is to heat the assembly to 1350°-1375° F. for a period of 15 minutes to two hours, depending on size of the chain, followed by air cooling.

Alloy chain equipment generally is repaired and reconditioned only in the plant of a chain manufacturer. Damaged areas are replaced with lengths of new alloy chain. All replacement connecting links are welded in place. The entire assembly is heat-treated, inspected, proof-tested, and certified just as though it was a new assembly.

Periodic annealing treatment is not required for alloy chain. The material does not become embrittled in service. As pointed out in the introductory remarks, annealing of alloy chains destroys the working properties of the assembly, as certified, and constitutes an extremely dangerous shop practice.



LADDER STEP for safety and efficiency!

Fits any standard rung ladder. Provides a safe, comfortable, level platform. Frame is of cast aluminum with hardwood step and safety walk to prevent slipping. Weighs only seven pounds. Thousands in use—in largest industrial plants. \$10.75 postpaid. Quantity prices on request.

Write Dept. NSN
BEAUIDEAL, INC.
867 S. Water—Saginaw, Michigan

Education

The first three phases of this suggested program are concerned with minimizing the effects of damage to sling assemblies. Prevention of damage to the assemblies through education is of equal, if not greater, importance. The nature and scope of the educational program will vary widely with each individual organization.

Two factors probably should be incorporated into any such program.

In the first place, the program should be directed to all levels of the plant organization, not just the men involved in the particular operation. Very frequently, the safety thinking of the worker reflects the interest in safety of his immediate superior. In the second place, the program should be a positive one based on "do's" as well as "don'ts" such as:

1. Do lubricate regularly
2. Do inspect periodically

—Next page



Jackson Type J-1 Eyeshield

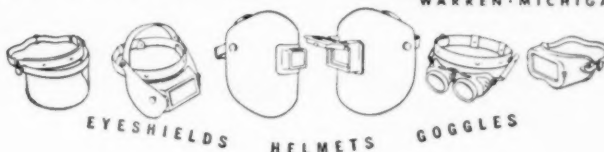
Extruded plastic headrest (1) is easy to clean, holds its shape. Size adjustment (2) locks positively along clearly marked hat sizes in 1/4-inch steps. No need wearing it too tight; adjustable cross strap (3) will hold it up. Absorbent, cork-padded sweatband (4) adds comfort; snapped on, it's easy to replace. Fiber spark deflector (5) protects forehead. Its spring pivots (6) have locked-in tension, no loose parts. Visor (7) of fire repellent, clear plastacel in choice of thickness and in three shades of green. .020" thick only. Depth in 3 sizes: 4", 6", and 8" as shown. Visor fastens with snap buttons against front of deflector to withstand impact.

Guard those Eyes and Guard that Face

Surprisingly light . . . 5½ ounces . . . worn as easy as a felt hat, this eye and face shield protects while buffing, sanding, light grinding, spotwelding and woodworking . . . against acids and molten metal. Jackson eyeshields have reduced the number of eye injuries in many industries, and will continue to do so . . . for you.

Through Distributors and Dealers Everywhere

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EYESHIELDS

HELMETS

GOGGLES

3. Do store correctly
4. Do handle properly
5. Do pad sharp edges or corners
6. Do use the proper size of chain
7. Don't twist or kink
8. Don't anneal alloy chain
9. Don't jerk or shock
10. Don't force a chain by hammering

In many cases sling life can be extended by proper handling just as much as it can be shortened by misuse.

*Safe Practices Pamphlet No. 98, National Safety Council.

Head Protection

—From page 25

Higgins also stencils the wearer's badge number on the front of his helmet for quick identification.

Many industries throughout the United States have established similar hard hat programs, and information concerning these programs may be secured from manu-

facturers and distributors of safety equipment.

Another unique feature of the Higgins program is that no man is allowed to work if he does not wear a hard hat. There are no exceptions to this rule; in fact, it has for a number of years been written into the union contract.

The first thing a new man receives following his employment is a hard hat or cap. Upon leaving the employ of the company, he turns in his hat for credit, otherwise the cost of it is deducted from his check.

Leon J. Baker, safety director for Higgins, states that the color idea has worked wonders in establishing the importance of head protection, and it also aids management in that it keeps unauthorized personnel away from operations. If a man with the wrong color hat or no hard hat is found in a department by a leaderman or foreman, he is immediately questioned about his reasons for



Berylco Safety Tools

Berylco safety tools are made of high-performance beryllium copper. This means that they minimize the possibility of generating hazardous sparks, are non-corrosive and nonmagnetic, and have strength equal to that of mild steels.

Because of the great strength of beryllium copper, Berylco Safety Tools can be made smaller and easier to use than safety tools of less sturdy materials. They also provide added service life. Your replacement costs are far less when you standardize on Berylco.

Berylco Safety Tools are sold by regional warehouse distributors the country over. For the name of the one nearest you—and for a complete, illustrated catalog of over 400 tools—write THE BERYLLIUM CORPORATION, Dept. 4E, Reading 14, Pa.



THE BERYLLIUM CORPORATION
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For Safety
Guard-Ann Hat
U.S. PATENT NO. 2,338,884

Combines utmost protection and style. Exclusive patented features found in no other hat.

Write for Free Sample or Order Direct from us

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630 HIGH STREET
BUFFALO 11, N. Y.

being there. If a satisfactory answer is not given, he is taken, not sent, to the foreman of his own department.

Civil Defense Programs

Many other industries have set up similar color codes, and just recently a number of Civil Defense organizations have set up a color code for quick identification of their members. The Detroit color code has worked out exceptionally well, and quite possibly will be adopted as the standard throughout the entire FCDA.

Wardens	White
Police	Blue
Medical	Green
Fire	Black
Rescue	Red
Communications	Brown
Welfare	Yellow
Engineering	Silver
Staff Members	Gold

The Industrial Safety Equipment Association, which is made up of manufacturers of all types of safety equipment, and other groups, is making recommenda-

tions to approval authorities for standard color codes for all types of industry. Such a code, they feel, would establish the importance of head protection more firmly in the minds of all interested persons.

Types of head protection used by various industries differs greatly. There are special hats and caps made for the electrical industry, and the mining industry. Such industries as lumber and petroleum seem to prefer metal hats and caps

to Fibreglass and plastic. Hard hats and caps are manufactured in ridged or smooth crowns, none of which weighs more than 14½ ounces. The lightest weight head protection in service today, which passes all standard tests is the aluminum cap, which weighs slightly less than 10 ounces.

The safety director or foreman in charge of safety frequently finds it somewhat discouraging when first trying to inaugurate a hard

GET THE FACTS ABOUT—

Lightfoot **TREET** POWDERED SKIN CLEANSER

THE MOST
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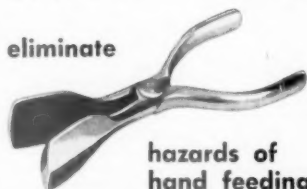
A HEAVY DUTY SKIN-CLEANSER without a peer in the industrial field. It has a high anhydrous content and is superfatted for extra mildness. This super mild soap is scientifically blended with an edible corn meal scrubber and a special skin emollient to give thorough, safe cleansing to the dirtiest hands.

COMMODORE—Same formula as "Treet" but extra coarse. Ideal for those who prefer a "rough feeling" soap, yet one that will leave the skin soft and smooth.

An Invitation—We will be glad to send detailed information and prices on these products, and invite you to ask for free sample quantities. No obligation, of course.

●●● OSBORN SAFETY PLIERS

eliminate



hazards of
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And they eliminate another hazard too: shattering. That's because Osborn pliers are made of Osmolloy—the aluminum alloy that flattens instead of shattering under impact. That means double protection: to workers' hands . . . to expensive dies. Remember: one ruined die pays for hundreds of Osborn pliers.

Ask for folder #553 showing dozens of Osborn safety pliers.

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LIGHTFOOT BAR SOAPS

PLAIN CUT

Made for industrial use
—office washrooms, plant
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"24 HOUR" DEODORANT SOAP

A mild toilet soap con-
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AVADERMA DRY SKIN SOAP

Contains milk solids and
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Send trial sample and information
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State

hat program. However, over the years, with the assistance of such organizations as the National Safety Council, Veterans of Safety, American Society of Safety Engineers, and the able help of safety publications, nation-wide programs to prove the importance and life-saving qualities of head protection have been most successful.

Publications and circulars, posters and signs, lectures, films, safety campaigns, support of insurance companies, Federal and State Gov-

ernments, have all aided tremendously in this effort.

The Turtle Club mentioned previously is a concrete way to register the importance of head protection to a group of workers. "It takes only one Turtle Club member to convince the rest of the men the importance of wearing a hard hat," said a safety director recently. "My men were all a little hesitant for fear someone might make fun of them for wearing a hard hat, until one of them was struck

by a tool which weighed eight pounds, and which fell 25 feet. It hit him with such force that it smashed the entire side of the hard hat, but the man was uninjured; in fact, except for the noise made when the tool struck, he was otherwise unaware of the accident.

Other men, seeing him wearing his new hard hat with the Turtle insignia on it, are constantly reminded that except for his hard hat, this fellow-worker would no longer be with them."

"Ideal Reel"—destined to become universal custom



FOR TYING REINFORCING STEEL, METAL LATH, PIPE INSULATION SAFELY AT LESS COST!

**ELIMINATES COSTLY WIRE WASTE . . .
INCREASES EFFICIENCY . . . PROTECTS WORKER.**

Proven by contractors who use "Ideal Reel"—wire waste elimination affords savings up to 33%. Actually increases tying speed by as much as 25%. Prevents eye and face injuries caused by flipping wire ends. Protects all employees from hazardous falls caused by loose wire on the job site. Eliminates bulky wire roll around neck. Stops falls caused by wire catching on obstacles. More than pays for itself in wire savings and increased efficiency.

"Ideal Reel," the ONLY wire dispenser designed for either Left or Right handed worker, is the most convenient and economical method known for tying metal lath, re-steel, and pipe insulation SAFELY. Write us to-day. Safety and Savings is good business.

Dealer inquiries invited.

Ideal Reel Company

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PADUCAH, KENTUCKY

Constructors Association Announces Seven Awards

The National Constructors Association, composed of the leading engineering and construction companies specializing in the design and construction of chemical and power plants, steel mills and oil refineries, announced awards to seven engineering and construction companies for outstanding safety records in 1953.

Companies receiving the awards

Kill the ROOTS and you kill the WEEDS!

NEW

DOLGE NP WEED-KILLER

—Can be used with confidence by anyone. Kills all vegetation. RESULTS APPARENT IN A FEW DAYS. Spray, sprinkle or use as dry powder—"built-in" wetting and spreading agent works fast by wetting waxy surfaces of plants and inducing penetration into leaves, stems, roots. Non-inflammable, non-volatile, non-corrosive.

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DOLGE E.W.T. 40-2, 4-D SELECTIVE WEED-KILLER

—Will not harm good lawn grasses, but kills dandelions, plantain and other broad-leaved noxious plants in turf.

Write for Dolge booklet on chemical weed control, and see your DOLGE SERVICE MAN.

Dependable
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National Safety News, May, 1954

included The Chemical Construction Company, New York; The M. W. Kellogg Company, New York; Fluor Corp., Ltd., Inc., Los Angeles; Ford, Bacon & Davis Construction Corporation, Monroe, La.; The H. K. Ferguson Company, Cleveland; J. F. Pritchard & Company, Kansas City, and Rust Engineering Company, Pittsburgh.

The awards are part of a continuing, year-round program launched by the National Constructors Association.

Age of Seeing

—From page 67

the right half of the slide and with the left eye saw the left half of the slide. Starting with the largest test target, she was asked to tell whether the checkerboard was in the top, right, bottom or left side of each of the 15 squares. The test was started with No. 1 and continued on until each subject could go no farther with correct responses.

A small percentage of subjects had difficulty seeing even the big targets with one or both eyes. Another small percentage went through the test with ease and saw the checkerboard correctly in targets No. 13, 14, and 15. The majority of individuals scored in the central area around target 10 or 11.

Fifty-one women in this one plant were working at hosiery seaming. Each of the scores on

the acuity test shown in Figure 2 was compared statistically to production data.

In the Lawshe Expectancy Chart (2), Figure 3, results of the statistical analyses are shown graphically. The standard of job success shown under point No. 5 on this chart is *those operators who seam 132 dozen pair or more per 40-hour week*. They are considered to be good operators.

From the graph at the top of the

NO DANGER



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Lawshe chart it will be seen that those operators whose Ortho-Rater test scores were 10 to 11 had 100 chances out of 100 of attaining the job success standard. Those who scored between 8 and 9 had 77 chances out of 100. Those who scored between 4 and 7 had only 17 chances out of 100 and those who scored 0 to 3 had only 15 chances out of 100 of reaching the desirable standard. It will be noted under Heading No. 6 that the test scores used were those for near point acuity, worse eye.

The statistical analysis under heading No. 8 shows that the probabilities of differences due to chance are 1 in 1000 times. Studies such as this have been made on many hundreds of jobs. The consistency with which such positive results are found indicates strongly that positive relationships exist between our seeing skills and our production.

Accident criteria were obtained on 499 workers on 14 different jobs at the U. S. Naval Ordnance Plant in Indianapolis. The Occupational Research Center at Purdue University then divided these employees into two groups for each of the 14 jobs.

1. Those who met the visual standards for their jobs.
2. Those who did not meet the visual standards.

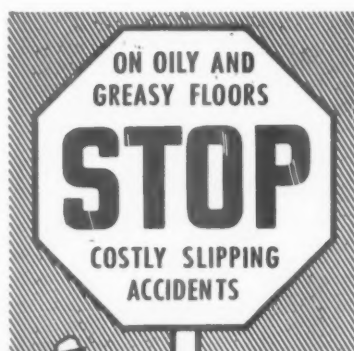
Figure 4 shows graphically how the visual standards, set on the criteria of employee productivity, also separate employees into high and low accident experience groups. This chart illustrates further that desirable vision for the job is a factor in low accident experience. Dr. Lawshe's *Expectancy Chart* (2) was used again to illustrate this relationship. The standard of job success is freedom from accidents over a two-year period. The graph at the top of the chart shows that those employees who met their visual job standard had 65 chances in 100 of being free from accidents over a two-year period while those who did not meet the standard had only 45 chances out of a hundred.

The probabilities of differences due to chance under heading No. 8 reveal that the relationship illustrated on this chart could have occurred through chance alone only about 6 in 100,000 times.

Frequently questions are asked concerning the relationships between each of the 12 vision tests in the Ortho-Rater and accident experience. Figure 5 shows the relative frequency with which each of 9 visual performance tests showed a positive relationship with accident experience. Stump (3) gathered the data shown in this table from 36 separate "on-the-spot" studies made in a variety of industrial plants in 18 eastern states and Canadian provinces. They covered jobs ranging from heavy machine construction to miniature armature winding.

For example, a high score on the *both eyes far* test showed a positive relationship with no accident experience in 94 per cent of the 36 studies made. The percentage of advantages in vision for the low accident experience group over the high accident-experience group in these 36 studies ranged from 5 per cent to 47 per cent while the average of the advantages was 25 per cent.

A good vision testing program



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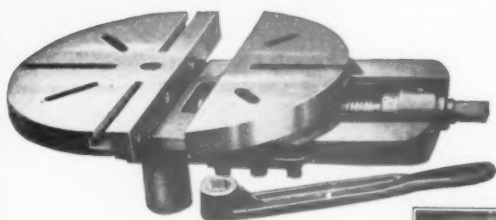
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is good employee relations. Employees like it. It benefits them as individuals and through these benefits it helps their company. Some managements take for granted the economic benefits and place employee relations as their prime objective in installing a vision program.

What does it cost?

Management Methods (1) in its report on the investigation it made recently on the value of vision programs in industrial plants stated "The cost of installing a vision program varies according to the number of employees, of course. The second factor is the extent to which the company is willing to go in helping the employee to have sub-standard vision corrected. Figures from a wide variety of different firms indicate that per employee cost including time away from the job, salaries of personnel administering the program and other items will vary from 7 cents per employee per year up to more than \$1 per employee per year.

Which factors of vision are most important?

The circled numbers in Figure 6 show the visual performance of an individual on 12 visual skills which have shown consistent relationship to productiveness and accidents. These 12 skills are listed also by authorities from the eye professions as being most important. (6) Other skills often are important but they do not lend themselves to standardized testing without clinical interpretation.

What standards should be used?

The Occupational Research Center of Purdue University set factual standards for the Ortho-Rater covering six families of jobs. One of these standards for mechanics and skilled tradesmen is illustrated in Figure 6. (7) The shaded section of this visual performance profile indicates the area which is undesirable. Scores falling in this area indicate that the employee does not meet this standard. Standards such as this are used because of a consistently demonstrated relationship between them and measures of employee success on their job.

Is there a scientific and economically sound method for measuring

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the important visual skills?

Several methods are available. The Keystone (8) Tele-binocular, the American Optical Co. Sight Screener (9), and the Bausch & Lomb Ortho-Rater (1) are all good instruments.

The 12 visual skills can be measured reliably in an average of 6 to 8 minutes.

What percentage of those whose vision is below desirable standards can be brought up to standard?

Tabulation of figures from many plants show that 90 per cent of employees who seek professional eye care as a result of in-plant-testing can have their vision brought up to meet the standard for their jobs.

There is an abundance of further evidence on the relationship between vision, success on occupations and freedom from accidents. Kuhn (11), Tiffin (7), Kephart (12), Lawshe (13), Wirt (14), Stump (3) and many others have documented their findings.

Those of us in the "one out of four" group who can profit from visual attention may or may not be aware of their inadequate seeing. A large percentage of us who are below desirable standards of visual performance for our occupations are unaware of it. No pain or discomfort which we relate to our eyes has indicated it to us. Our eyes don't hurt. So it is with countless thousands of individuals across this country who need better seeing and yet do nothing about it either through lack of awareness or lack of stimulation to act.

Some retardations which have kept us from giving adequate attention to our seeing are:

1. Lack of awareness of the need.
2. The public concept that good visual acuity in each eye at a distant point (20-20) was the one and only criteria for good vision.
3. The public concept that eyes are either strong or weak, good or bad.
4. The public concept that glasses are a sign of physical weakness or of old age.
5. The lack of public education on the importance of visual performance to our occupations and to our general well being.
6. The public concept that eyes that don't hurt are efficient eyes and conversely that eyes that hurt are bad eyes.
7. The public concept that adequate illumination will answer seeing problems or conversely that adequate visual

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performance will answer lighting problems.

Such opinions have kept thousands from seeking the eye care which they need for their own efficiency, safety, and general well being, and it has kept many companies from improving their lighting.

Seeing is different from other measurable human characteristics such as finger dexterity, temperament, motivation, intelligence, height or weight. Something can be done to improve it when it is below desirable standards. The ophthalmic practitioner can in a high percentage of cases transform inadequate vision from clumsy or uncomfortable performance into smooth, effortless and skillful seeing. Adequate illumination enables workers to use their seeing skills more effectively.

This is the age of vision. It is the age of speed and precision. The work load has been lifted from men's backs and placed on their eyes. The need is for skill, judgment and timing based on visual perceptions. We read gages, make adjustments of delicate instruments, inspect through microscopes, move levers which guide rapidly moving machines. The task of reading reports, preparing blueprints and handling clerical work is never done. The common laborer who can rely on casual vision is becoming rare. The farmer no longer plods behind his plow. He drives machines and keeps books. This is the age of seeing. It is the age of TV and 3-D.

The evidence is clear-cut that a relationship exists between our seeing performance, our freedom from accidents, and our productivity. Adequate illumination is a basic ingredient of skillful seeing.

Improvement in illumination will result in improved visual performance, resulting in better employee performance. It is our observation that companies which install good vision programs are better candidates for adequate lighting. Conversely, companies which have installed adequate lighting are better candidates for vision programs.

A recent survey by *Modern In-*

dustry showed that vision testing now stands No. 13 on the list of projects that get most results and No. 13 among the projects that would be dropped if retrenchment became necessary. A few years ago a vision testing program would not have been mentioned.

Adequate illumination and adequate visual performance are not synonymous. Each is a necessary ingredient in the task of seeing efficiently on our occupations. Our observations would indicate the desirability of those of us who have been concerned with visual performance to give more thought and attention to the ingredient of adequate lighting and those of us who have confined their thinking to adequate lighting should give more attention to the ingredient of visual performance.

Improved lighting often brings latent visual problems to the surface. Too often, it is blamed for visual discomfort. It can be rea-

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sioned that the visual tension is caused by the greater stimulation to action of a pair of eyes that previously coasted along casually under low illumination. The prescription for this condition should not be a return to the old lighting but rather a check on the visual performance of those employees who are uncomfortable.

Summary

1. Adequate illumination is an essential ingredient of efficient seeing. Efficient seeing is an important factor in our productiveness, our freedom from accidents, and our general well being.

2. Seeing is different from many other measurable human characteristics in that something can be done to improve it in a very high percentage of cases when it is below desirable standards. Professional attention for those below standard and improved lighting provide a direct and positive approach to better productivity and fewer accidents.

3. Adequate lighting and adequate seeing are not complete answers to the problem of accidents but the evidence is clear-cut that they are very important factors.

4. Improved lighting results in improved seeing both for those whose visual performance is adequate as well as for those whose vision is below standard.

5. Improved lighting stimulates action toward better eye care while eye

care creates awareness of lighting needs.

6. Improved lighting and improved visual performance supplement each other to the benefit of all concerned.

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Personals

—From page 57

moted to director of safety and security at Murray.

Mr. Harvey has been a director of the Detroit Industrial Safety Council and a member of the National Safety Council's Automotive and Machine Shop executive committee.

Promotions at NEPCO

Three appointments in the department of industrial relations of Nekoosa-Edwards Paper Company, Port Edwards, Wis., have been announced.

E. P. SUPRISON, a member of the organization since November 1932, was named employment di-



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rector. In this position he will continue to supervise selection and placement of employees and administer personnel records.

ERNEST BERRYMAN was named safety director and insurance administrator. In this capacity, he will be responsible for NEPCO's safety programs, health service, workmen's compensation, NEMBA and life insurance.

The title of training director was assigned to RUSSELL J. CRETE. In this new position in the company, he will administer programs of management development and employee training.

Mr. Surprison has worked in practically every department in the mills since coming to NEPCO in 1932. He entered military service in July 1942, where he earned a commission in the army engineers and served as a training officer until 1946. Upon his return he joined the industrial relations department, working on safety and personnel records. In September 1947 he was named assistant employment manager and in December 1948 took over full time duties.

Mr. Berryman has had a varied background since joining the company in March 1935, working in the mail room, print shop and accounting department before entering the army where he served three years. Following his return from service, he worked in the Port Edwards timekeeping office and joined the industrial relations department in October 1952.

Mr. Crete, a 1948 graduate of the University of Wisconsin with a major in economics came to NEPCO in September 1949 from Oscar Mayer & Company where he had been assistant to the director of personnel research and testing.

As staff assistant in the industrial relations department he developed projects relating to personnel administration, safety and training. Since January 1953, he has co-ordinated organization training programs.

Appointment of PHILIP A. HAVEY as district engineer in charge of the New England territory has been announced by the Hartford Accident and Indemnity Company. He succeeds Charles R. Sinclair,

who retired February 1 after 33 years of service.

Mr. Havey brings to this position a broad engineering background which has included 17 years' experience with the Hartford as an engineer servicing risks throughout New England. For the past several years he has assisted Mr. Sinclair in directing the operations of the New England District. Prior to joining the company Mr. Havey was associated with the Connecticut State Highway Department.

Cases for Comment

—From page 40

finally agreed that on the basis of the present code, the case should be counted in the company's injury rates. The injury occurred in the course of the employee's work, and since his work required him to be in the area, it was decided that the injury arose out of his work.

* * *

Here is an example of the desirability of not only surveying your own operations for possible trouble causes, but surrounding operations or areas as well.

Such things as traffic control at starting and quitting times, emergency action in case of fire or explosion on your property or that of others, and other seemingly isolated cases you might feel do not directly involve your attention as a safety man.

The main objective is to keep the man on the job. Don't limit your sights to the obvious.

More Sales Effort

—From page 29

to create in the mind of the man and woman on the job the desire to work safely. We should be careful, too, not to attempt to instill that desire by the fear motif of lost wages or lost hands or arms, but rather to have safety accepted because safety is a desirable thing from the standpoint of a good worker.

Ever since the days of Taylor, the man who developed the theory of "the one best way" we have been attempting to apply this theory to safety on the job. If "the one best way" that a job can be done is the most efficient way, then obviously that "one best way" would also be the safest way. I think Taylor proved that in his

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To be sure of
the Genuine



Demand this
Trade Mark

INDUSTRIAL GLOVES COMPANY

A Corporation

1701 Garfield Street, Danville, Ill.

(In Canada: Safety Supply Co., Toronto)

work in the steel mills of Gary as early as 1890.

You may remember the dramatic proof of his theory in manual unloading of cars and ore. Not only did he cut the time of unloading the cars by 75 per cent but he increased the wages of the workers about 40 per cent. And, too, there were no injuries experienced when his "one best way" was adopted and put into use by the unloading crew.

Gilbreth, I think, also proved that with his time and motion studies. He, too, was a devotee of "the one best way" method. Through his studies of motion pictures against a time clock background, he was able to eliminate unnecessary motion—his theory being that unnecessary motions were inefficient and that every unnecessary motion offered an additional opportunity for an accident or injury. Again, notable differences were seen in accident rates where such programs were put into effect.

The "one best way" method has long since been adopted by American industry, and in most plants jobs are carefully studied to eliminate inefficiencies. Where this is done seriously and objectively, not only are inefficiencies eliminated, but accident-producing causes are eliminated as well.

Let us get back to the idea of selling safety to the man on the job.

How many of you have ever had a door-to-door salesman call on your wife and offer to cook her a free meal for herself and all of the neighbors if she would act as hostess? All he wanted was the use of your home and he would agree to give your wife a gift—usually a pot or a pan.

He made no mention of selling pots or pans to anyone—not until the meal was over. But then the heat was on! After an excellent meal, the question period was sure to bring up the subject of the pots and pans in which the meal was cooked.

I know this from experience. The man usually walks out with an order from the guests for several sets of pots and pans. Your wife gets her gift and generally

—To page 136



WHAT'S NEW

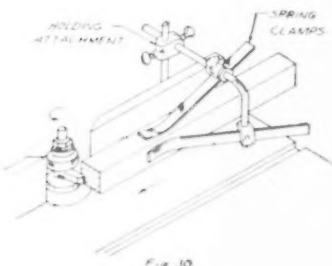
IN

NATIONAL SAFETY COUNCIL SERVICES *

Woodworking Safety

Do you have a woodworking or carpenter shop in your plant? Does your company manufacture sash and door, trim or furniture?

If your answer is yes to either of these questions, you'll want one or more copies of the Council's new book *Jig and Fixture Design for Woodworking Safety*.



One of the 61 drawings in *Jig and Fixture Design for Woodworking Safety*. Device holds stock firmly against cutting edge of shaper so operator need only push work through cutting path.

Here's a king-size volume of more than 100 pages describing the many devices that can be used to keep your woodworking machine operators from being chewed up by the power tools with which they work.

The book contains 61 illustrations that show in detail jigs and fixtures that support stock against a cutting edge enabling operators to work more efficiently and with greater safety. Beginning with the simple push stick for feeding stock into a circular saw, the book progresses to more intricate devices designed for use on saws, jointers, shapers, routers and belt sanders.

Jigs and fixtures provide workers with a feeling of security that

promotes increased production. And the more accurate positioning of stock makes for a higher quality product.

Jig and Fixture Design for Woodworking Safety is printed on 8½x11 pages and bound in heavy paper. The book is priced at \$1.75 for both members and nonmembers.

Operation Safety

There's a new arrival in Operation Safety's line of promotional items. The latest addition is a small "Stay Alert, Stay Alive" Day-Glo sticker.

This item was added in answer to popular demand. And that's not just a press agent's cliché.

First used as a miniature on a promotional sheet to publicize larger "Stay Alert, Stay Alive" stickers, the pint-sized stickers made such a hit that many people wrote in to suggest that the Council add them to its list of items. They also suggested many ways in which such tiny safety reminders could be used in plants.

The Council was convinced, and now the stickers are available.

Printed in brilliant fluorescent Day-Glo red letters on a jet black background, the stickers are sure-fire attention getters. They serve as constant reminders to employees to stay on the ball.

Industrial firms have suggested that they be used on machines, on hard hats, on bulletin boards, on company publications and other company literature, and in various places in office and plant where a safety message is needed but where

a minimum of space is available.

Firms operating fleets can use them as dash stickers to urge their drivers to stay safe in traffic. And, of course, they can also be used as dash stickers in off-the-job safety programs.

The stickers are 1½" x 4" and are priced as follows: 1 to 9, 10 cents; 10 to 99, 6 cents; 100 to 999, 4 cents; 1000 or more, 3½ cents.

Storage and Piling

Really Stacked is the title of the Council's answer to the membership's continuing demand for an employee publication on the principles of safe storage and piling.



This 16-page booklet combines cartoon treatment with straightforward instructional material. Crosstying, load limits, how to stack irregular shapes, and fire-safe storage are among the subjects discussed and illustrated.

Duty is something we look forward to with distaste, do with reluctance and boast about forever.

* Look to this page each month for latest news about NSC services. Address requests for additional information, samples or prices to the Membership Department.

For a Successful Poster Program



ACCIDENTS OCCUR
when least expected

BE ALERT!



JUMBO POSTER FOR JUNE '54

The Jumbo poster, issued monthly, is designed for outdoor use and is available to members on annual subscription but is not stocked. Its actual size is 9' 11" by 11' 8".

ON THE BEAM!

THE new 1954 Directory of Occupational Safety Posters will help keep your safety program "on course." It contains miniatures of 744 posters—topnotch selections on a great variety of subjects. Additional copies are available at 50 cents each—write to Membership Dept., National Safety Council.

Posters miniaturized on this and the following pages are NEW. Excepting the Jumbo poster (left, upper), all will be in stock throughout 1954. Those posters shown in one color on the following two pages are actually printed in two or more colors.

For a more successful poster program: first make your selections from the brand new posters shown on these pages and then from the hundreds of illustrations in the 1954 Directory.

Stop right up, folks
Here's a game that's good for life—
**EVERYONE
WINS
NOBODY
LOSES!**



NATIONAL SAFETY COUNCIL

0114-A

8 1/2 x 11 1/2



0180-C

25x38

Above new "C" poster, issued monthly, is indicative of the other two color posters—shown in one color on the following pages and in the 1954 Poster Directory.

This new four color poster is illustrative of the 72 four color posters shown in the 1954 Poster Directory.

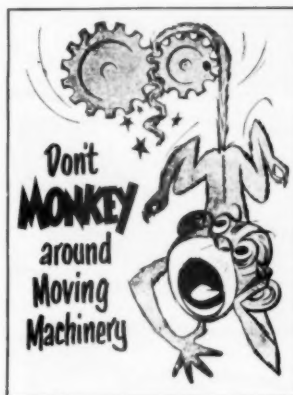
Electrotypes of poster miniatures on this page are not available, nor can payroll inserts be supplied.

Posters below are printed in two or more colors

(Available only in sizes indicated)



NATIONAL SAFETY COUNCIL
0145-A 8½x11½



NATIONAL SAFETY COUNCIL
0069-A 8½x11½



NATIONAL SAFETY COUNCIL
0173-A 8½x11½



NATIONAL SAFETY COUNCIL
0179-B 17x23



NATIONAL SAFETY COUNCIL
0026-A 8½x11½



NATIONAL SAFETY COUNCIL
0164-B 17x23



NATIONAL SAFETY COUNCIL
0148-A 8½x11½



NATIONAL SAFETY COUNCIL
0149-A 8½x11½



NATIONAL SAFETY COUNCIL
0150-A 8½x11½

Electrotypes of payroll inserts can be furnished in all poster illustrations shown above.

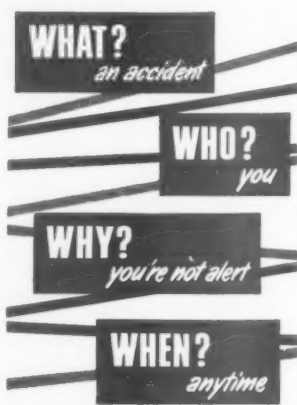
Posters below are printed in two or more colors

(Available only in sizes indicated)



0135-B

17x23



0165-B

17x23



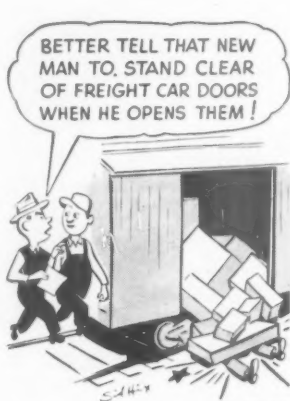
9961-B

17x23



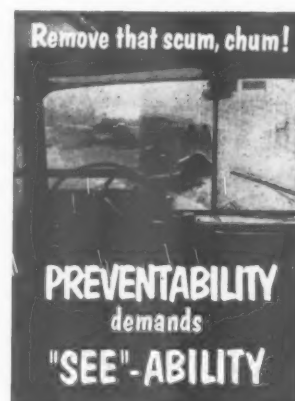
T-0156-B

17x23



0134-B

17x23



V-0171-A

8½x11½



V-0175-B

17x23



V-0176-B

17x23



V-0162-A

8½x11½

Electrotypes of payroll inserts can be furnished in all poster illustrations shown above.

"35,159 Payroll Savers in Southern Bell ..."

MR. FRED J. TURNER,

*President, Southern Bell Telephone
and Telegraph Company*



"Thrift is an old-fashioned virtue that has never gone out of style in America. It is one of the foundation stones on which our material well-being as a nation is built. The payroll deduction plan for the purchase of U. S. Savings Bonds provides a particularly convenient way for the individual to practice thrift, to invest in his country, help provide for its security, and accumulate a stake for the future."

True, thrift has never gone out of style in America. In fact, thrift is more fashionable today than in any previous period in our country's history.

For example:

- 8,000,000 thrifty employees of 45,000 companies—among them the 35,159 men and women of Southern Bell—are investing over \$160,000,000 per month in U. S. Savings Bonds through the Payroll Savings Plan.
- In 1953, the Series E and H Savings Bonds bought by individuals—not banks or corporations—totaled \$4,368,000,000.
- Thanks to the support of the Payroll Savings Plan by industry and business, and the thrift of millions of Payroll Savers, the cash value of Savings Bonds held by

individuals amounted to \$36,663,000,000 at the end of 1953.

What's good for Americans is good for America.

- Sales of E and H Bonds in 1953—22% higher than in 1952—provided cash for *all* E and H Bond maturities and redemptions and still left more than \$210,000,000 net, for the reduction of the debt.
- Think of the reserve of future purchasing power represented by the more than \$49,000,000,000 in Savings Bonds, cash value, held by thrifty Americans.

A telegram, phone call or letter to Savings Bonds Division, U. S. Treasury Department, Washington, D. C., will bring you all the help you need to install a Payroll Savings Plan or build employee participation in your present plan.

The United States Government does not pay for this advertising. The Treasury Department thanks, for their patriotic donation, the Advertising Council and

NATIONAL SAFETY COUNCIL



COOLER FOUNTAIN NEWS

VITREOUS CHINA TOPS NOW AVAILABLE

Popular 15-inch Line of Halsey Taylor Cooler
Fountains now with Vitreous China Tops

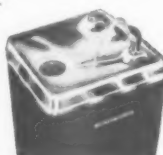


F-31

Industrial users of Electric Coolers prefer the space-saving 15-inch size. Therefore, it's welcome news to know that Halsey Taylor now furnishes this popular size with Vitreous China Tops.

Gleaming vitreous china is always easy to keep clean, and—with the Halsey Taylor distinctive two-stream projector—these coolers are the most hygienic and health-safe you can buy.

See our catalog in Sweet's or write!



Stainless Steel Tops Also Available in
15-inch Cabinets or Cafeteria Models

THE HALSEY W. TAYLOR CO., Warren, Ohio

Halsey Taylor

COOLER FOUNTAINS

BEST

for

LESS

EYEGARD

IMPERIAL

GOGGLES

The latest and greatest development in eye protection and comfort. In quality, the finest that years of experience and technical "know-how" could produce—yet priced well below what you would expect to pay. Six styles—cover-all and regular—write for literature and prices.

- Uses standard 50 MM round lenses
- 22% larger than ordinary goggles
- More ventilation through cup slots—no fogging of lenses
- Feather-weight aluminum rims and side shields
- Face shaped contour to fit snugly, comfortably
- Available with or without metal adjusting top bar

500 WELDERS
COVER GOGGLES
with baffled
side shields

501 CHIPPERS
AND GRINDERS
COVER GOGGLES
with perforated
side shields



AMERICAN INDUSTRIAL SAFETY EQUIPMENT COMPANY
3501 LAKESIDE AVENUE CLEVELAND 14, OHIO

Division of The Burdett Oxygen Company, Cleveland, Ohio

More Sales Effort

—From page 130

likes it, and it's not very many days before she has a desire for a set of the pots and pans, too.

So what happens? You call the salesman and pay \$60 or \$80 for pots you need like an extra piano, because the desire has been created in your wife's mind. The salesman didn't sell them; your wife bought them. That's the way you've got to sell safety, too. You create the desire in the minds of employees and they will buy your product.

In my kind of safety business we must place the utmost dependence on the men in even the most menial job in our establishment. We are dealing in chemical products. A simple mistake by one individual might mean not only his own life, but the lives of several others in the vicinity and possibly severe property damage.

It is impossible to supervise an operation such as this so closely that the continuously careless man will be caught before he causes an accident.

In this kind of work, or any work where there is an instantaneous danger to the individual or a group, the careless man must be weeded out long before he has a chance to cause an accident. This doesn't necessarily mean that he need be eliminated from the job, but merely that he be discovered and then made to realize the responsibilities of the work he is doing insofar as they affect himself and his fellow workers.

In other words, you must create the desire to work safely in this "careless" man just as you have in the minds of the careful men on the job. He must be convinced that safety is a prerequisite to work and that any lapse in a caution may result in disaster.

I have tried lectures, safety-graphs and films before groups of workers engaged in this type of work. Generally, the lectures are held in the morning hours or late afternoon hours. I have taken careful note of the individuals at the meetings, and almost invariably one or two will nod and go to sleep. Others will gaze out the windows, others will fool with

their hair, reflectively scratch their chin or ankle, fidget around, and in general wish they were somewhere else.

The truth of the matter is, that while I could talk loudly enough to keep them awake or adjust the volume on the sound strip machine so that they couldn't possibly sleep, the stuff I was trying to put over was not interesting enough to hold their attention and make them want to take part in it.

The method which we are using now is not new; it has been used many, many times successfully in connection with safety meetings. Not only is it used with the direct meeting-type of program, but also with safety films, safetygraphs, foremen's five-minute safety talks, and what are often called tail-board conferences.

Have you ever seen a bunch of women at a bridge party sitting around the tables all cackling at once? While playing bridge, simultaneously each one is telling a story about someone she knows. No one can possibly understand what the others are saying, but every one of them are happy.

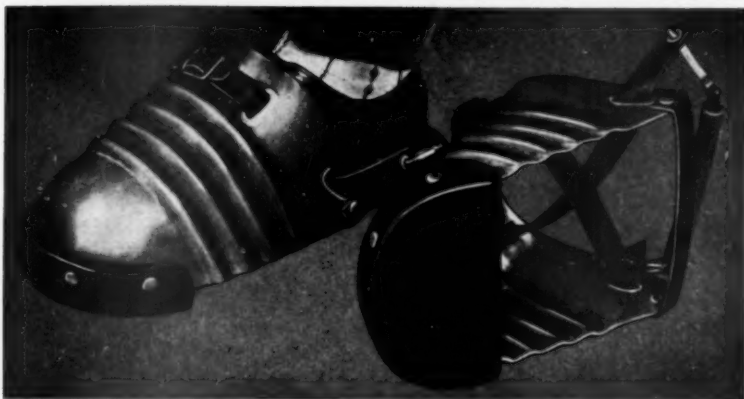
They're talking—they feel important. They think that they're being listened to and that their ideas are being accepted, so they play bridge, chatter away, collect their prizes, go home happy—and the old man gets a cold supper. Well, that may not have much to do with safety, but it does have a lot to do with human behavior.

The average individual, like this writer, loves the sound of his own voice. I don't expect you to admit it, but maybe privately tonight, just before you go to bed when you're looking in the mirror to see what a handsome fellow you are, you probably will admit that you have a pretty good speaking voice, that you're convincing and that your flow of words is wonderful.

Well, believe it or not, the fellow who runs a lathe, lays bricks, shovels sand or does any other kind of work feels the same way. He, too, likes the sound of his voice and he is a pretty important individual—especially to himself.

If you recognize that importance and let him talk, you'd be amazed to find out what collective-

ARE YOU FULLY PROTECTING THE FEET OF YOUR EMPLOYEES?



"SANKEY" IMPROVED FOOT GUARD

"SANKEY" FOOT GUARDS consist essentially of a metal shield to be worn over the shoe whenever the foot is in danger of being either crushed or cut. The metal shield is designed to furnish a maximum amount of protection to the entire front of the foot—not merely the toes alone, but also the instep against hazards from falling, rolling or flying objects, or from accidental tool blows. Write for a trial pair.

For additional information about "SANKEY" Foot, Toe and Leg Protective Guards please write the ELLWOOD SAFETY APPLIANCE CO., 219 Sixth St., Ellwood City, Pa.



Fibre-Shin and Shin-Knee Guard

Free Booklet

how to save
money in
maintenance...

Send for this complete guide to the right scaffolds and ladders for cleaning, painting, electrical work, plant and equipment maintenance, etc. It lists types of jobs and tells you which equipment is best for each. It's packed with pictures and ideas on how to cut your off-the-ground maintenance costs and increase safety. Years of scaffolding know-how condensed for you . . . and it's yours without cost.

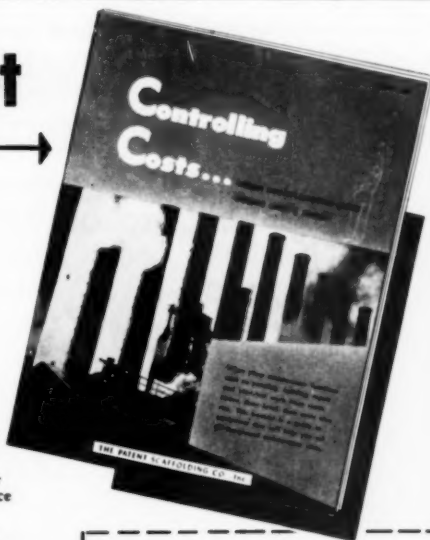
Patent Scaffolding—gives you the right scaffold or ladder for every job . . . and everything from one source!



For Greater Safety...Efficiency...Economy

THE PATENT SCAFFOLDING CO. INC.

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THE PATENT SCAFFOLDING CO., Inc.

38-21 12th St., Dept. NSN, Long Island City 1, N. Y.

Please send me my free copy of Bulletin G-205

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Position

Company

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**WANT MORE EFFICIENT—
LONGER LASTING STEEL STAMPS?**



Knurled sides for positive grip—patented design provides perfect balance and deeper impressions. Especially recommended for toughest jobs on steel castings, cylinders, tool steel, etc. All sizes available $\frac{1}{16}$ " to 1" characters.

Write for
Catalog
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1053 CHATEAU STREET, PITTSBURGH 33, PA.

I.D.U. POISON IVY SKIN LOTION

**GUARANTEED PROTECTION
AGAINST TWO OF SUMMER'S MOST
DISABLING AND ANNOYING POISONS
POISON IVY and POISON OAK**

For more than a decade IDU Skin Lotions has been giving outdoor workers, linemen, utilities workers, gardeners and foresters the protection they need from poison ivy and poison oak.

These two spring and summertime hazards to health and efficiency may soon become troublesome. Be prepared!

*Don't let these irritating conditions
develop—use IDU for their prevention*

ORDER NOW

Available at the following prices:

4 oz. bottles.....	\$ 6.00 a dozen
8 oz. bottles.....	\$10.00 a dozen
1 pint bottles.....	\$16.00 a dozen

Send for a free sample on official company stationery today.

I.D.U. PRODUCTS CO.
WAUSAU, WIS.

ly a group of workers will know about the safety problems in their particular department.

Our first real attempt at this type of meeting was started when we developed the safetygraphs at the National Safety Council five years ago. The safetygraph was not intended to be a lecture, it was not intended that an individual get before the group and read the stuff on the back of the graph while the audience listened.

Rather it was designed only to arouse the interest of the group, and the original plan was, and I hope it's being lived up to, that the speaker on the platform would do about 10 per cent of the talking with the audience doing the rest. I have personally used the safetygraph more than 500 times, and I have never had any trouble getting a meeting started. The only trouble was in getting the meeting shut down.

Sometimes it's a problem getting the boys started, but usually after one or two minutes have passed one individual with a little more nerve than the rest will speak his piece, and from there on everybody in the place wants to get into the act.

What good does this do?

First, you have told these men what you were going to talk about. Second, you gave them your message. Third, and more important, you made them think about safety when you asked questions, for in order to talk to you they had to think a little bit more about safety and they gave you, in their own words, their thoughts on a particular safety subject.

You've made them listen, you've made them think, and you've made them talk.

It's been my experience, not only with workers on the job, but with supervisors as well, (where we've used a different type of safetygraph), that where they have talked and thought about a particular safety subject, they generally live up to the safety rules pertaining to that subject, at least until the next safety meeting.

The same thing holds true with foremen's five-minute talks.

Nothing is more deadly than to have a foreman pick up a group

of eight or ten men in the morning and say: "Fellows, I'm going to talk about safety today." Then to take out a five-minute talk prepared by the Council or by the safety director or which he's torn out of a magazine somewhere, and then read in a deadly monotone: "Now fellows, today we're going to talk about safety, and safety is a very important subject and I want you fellows to listen to me because you're going to get hurt if you don't."

You can imagine what kind of a hit that makes, and how much attention he holds. Compare that kind of meeting with a group participation meeting, and see which you like better.

Now how to put over this kind of program in an industrial plant?

The first thing is, of course, to take advantage of the experience, knowledge and willingness of your indestructible supervisors. Remember, supervisors are leaders, not teachers, and it's up to you as a safety director or training director to supply them with the kind of material that will be easiest to use and most useful and helpful to them in putting over the safety ideas.

It's a simple matter for the safety director to sit down with a safety catalog in front of him and pick out posters, five-minute talks, safetygraphs and what-have-you and then toss it over to his foreman and say: "Here—use it—stop accidents."

The foreman has a million and one things to do—he has his own problems and worries in the plant and even though he may be completely sympathetic with the safety program, he will also feel as though you are imposing on him as he has to do extra work to work up the material which you have given him.

Make your safety material as easy to use as possible. Have it as simple as possible, not elaborate and expensive. What's more, in every piece of safety material used to influence the man on the job, try to have something in the use of the material that will call for employee participation, either actively or orally.

I have observed many presentations where supervisors employed

ALBINA MECHANICAL STIRRUPS

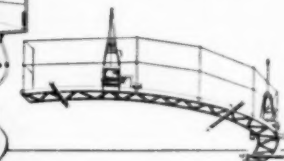


Say these users

Western Electric Co., Kearney, N. J.
Pacific Gas & Electric Co.,
San Francisco, Calif.
Eastman Kodak Co., Rochester, N.Y.
W. P. Fuller Co.
Ford Motor Co., Detroit, Mich.
Western Waterproofing Co.,
St. Louis, Mo.



Safety Approved by: State, Municipal, and Corporation Safety Boards and Certified Engineers.



Write for your copy of the bulletin describing Albina Mechanical Stirrups

ALBINA ENGINE & MACHINE WKS.

2100 N. ALBINA AVE., PORTLAND 12, OREGON

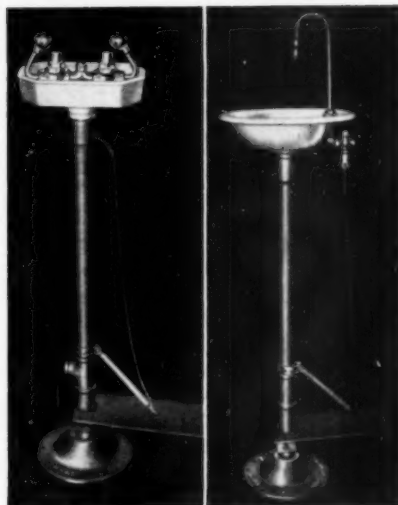
TAKE EVERY PRECAUTION ...

TO SAVE PRICELESS VISION!

The HAWS Eye-Wash Fountain makes it possible for the worker himself to safely, easily wash injurious chemicals and foreign matter from the eyes before medical aid can be at hand. Has the potentiality of saving vision, reducing insurance claims.



AND to prevent dangerous and expensive eye accidents, encourage workers to wear goggles and plastic face shields by installing a HAWS Goggle-Wash Fountain—eliminates one of workers' main objections to wearing these safety devices.



"Precaution" is really the cheapest thing you can buy!
HAWS Safety Equipment costs only a few cents per worker.
Write for literature today!

HAWS

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1445 FOURTH STREET (Since 1909) BERKELEY 10, CALIFORNIA



wear a

DUPOR No. 40

the Respirator that is
U.S.B. of M. Approved
for Type A Dusts

More than 40 sq. in. twin filter area.
Sanitary face cloth. Soft rubber face
mask. Controlled breathing . . . check
valves guard against re-breathing stale
air . . . exhalation valve exhausts breathed
air. Greater visibility . . . no blind spots!
Does not interfere with goggles or glasses.



Sample \$300
sent —pp

H. S. Cover Fog-Proof, Gas-Tight Goggles for use with above respirator . . . \$2.00 pp

H. S. COVER, South Bend, Ind.

Western Stove Works

Saves Fingers with

Pres-Vac SAFETY FEEDERS

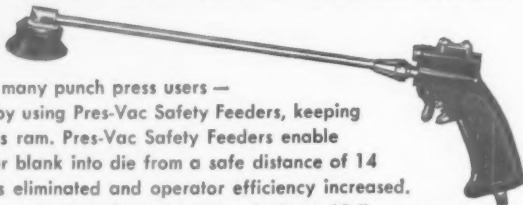


Western Stove Works,
well-known California

manufacturer — like so many punch press users —
saves workers' fingers by using Pres-Vac Safety Feeders, keeping
fingers away from press ram. Pres-Vac Safety Feeders enable
operator to feed part or blank into die from a safe distance of 14
inches. Fear of injury is eliminated and operator efficiency increased.

Also AIR,
BLAST VALVES

Pres-Vac operates from compressed air at 45 lbs. pressure
which passes through a venturi to create a vacuum.



F. J.

LITTELL

Speed
MACHINE
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with Safety

AIR DIVISION

4145 RAVENSWOOD AVENUE

CHICAGO 13, ILLINOIS

District Offices: DETROIT and CLEVELAND

Write for FREE Catalog

films, five-minute talks or just a handful of safety posters. These were used to introduce the ideas which were being presented at the meeting. The work was done on company time; I think we spent about 21½ hours of instruction time with a group of 15 or 20 men.

The results were amazing. Not only did the foremen enjoy the instruction which had been given them, but also they enjoyed putting it on with the groups of workers later. The preparation time for the foremen was decreased and most of the good ideas came from the workers whom they were instructing.

I've mentioned films several times in this talk, and the point may be raised, how do you use a film with this type of instruction.

In many cases I've seen safety films put on by either the training department or the safety director and then as soon as the film was over, the meeting was declared adjourned. At that point about 50 per cent of the group would wake up and stumble out of the place without having the faintest idea of what had been presented. When you show films, you can rest assured that some of the boys are going to sleep. Remember, these are not epics, they're teaching films and some fellows just don't want to be taught that way.

On the other hand, if you hold a discussion period after the film showing, you're bound to get something across to the fellows who napped through the picture. Furthermore, you'll get more good ideas from the fellows who did stay awake and who are interested. Everything they say will influence, to some degree, the men who are not fully convinced. Constant pressure will eventually convert them.

The biggest job, and the most challenging job, and the one which will take the most hard work and effort is that of selling safety at the job level. Here we must make our material as simple and easy to use as possible, we must present it interestingly and we must key our presentation so that most of the thinking and talking is done by the man on the job.

Green Cross News

—From page 52

Dr. J. O. Christianson of the University of Minnesota; Dr. Harvard T. Hill, Kansas State College, Manhattan, Kans.; and Myron E. Joldan of the Standard Oil Company, Milwaukee. Sectional meetings cover electrical and plant maintenance, food and beverage, foundry, machine shop, management and supervision, material handling and transportation, metal trades and all-trades section.

Grand Rapids Dinner

At the annual joint meeting of the Greater Grand Rapids Safety Council sections, held Tuesday evening, March 23, Paul Jones, director of Public Information, N.S.C., was the banquet speaker. His subject "What's the Use?" was a witty, yet shrewd analysis of certain phases of the safety problem, with chuckles and laughs galore, along with some serious moments that added conviction to his straight-from-the-shoulder comments.

The annual dinner is staged by the industrial, commercial fleet, and industrial nursing divisions of the Grand Rapids Council, in cooperation with the "Y" Foremen's Club and the Industrial Council of the local Y.M.C.A.

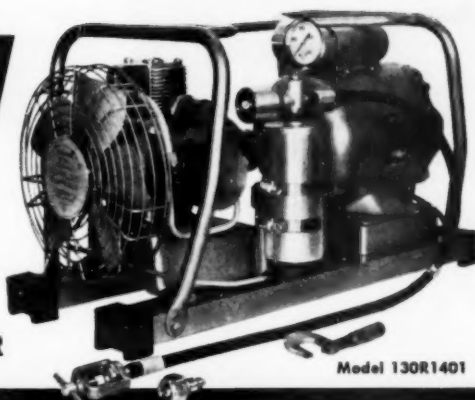
Businessmen "Pretend"

Forty-five Oakland area business and civic leaders, headed by Dr. J. C. Geiger, Oakland's widely known City Health director, staged a grim safety lesson recently in a most unique adult version of "blindman's bluff." It was a "Let's Pretend" stunt, an audience participation program in which the luncheon club members and guests donned black masks and "pretended" that they had lost their eyesight.

The difficulties encountered in trying to do such simple things as tying shoelaces, lighting cigarettes, pouring toothpaste on brushes and other common habits of daily living, served to emphasize the need for protecting the eyes in hazardous industrial jobs. The volunteer actors were supposedly plant employees who forgot to wear their goggles and as a result

NEW

PORTABLE HIGH PRESSURE AIR COMPRESSOR



Model 130R1401

FOR CHARGING DEMAND TYPE RESPIRATOR TANKS

The Cornelius Air Compressor is especially designed to compress pure, clean air into storage tanks used with demand type breathing apparatus. Capacity, 2 CFM. Pressures to 3000 PSI. Entire assembly ready to operate, including 1 H.P. heavy-duty AC electric

motor, oil filter and moisture separator, and self re-sealing relief valve, weighs only 79 pounds. Don't be caught short of compressed air supply. The Cornelius Air Compressor will provide maximum protection and pay for itself in a short time.

Cornelius

PORTABLE
AIR COMPRESSORS

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We invite your inquiry and shall be pleased to send you complete details.

THE CORNELIUS COMPANY

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Do you work with ACIDS AND CHEMICALS?

NOW SAVE UP TO

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Industrial Apparel of acid
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OUTWEARS COTTON 50 TO 1
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QUICKLY — NO IRONING!



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WORKLON, INC. Dept. N55, 253 West 28th St., New York 1
FREE! Rush WORKLON's new, fully illustrated catalog of
ORLON, DYNEL, and COTTON WORK CLOTHES.

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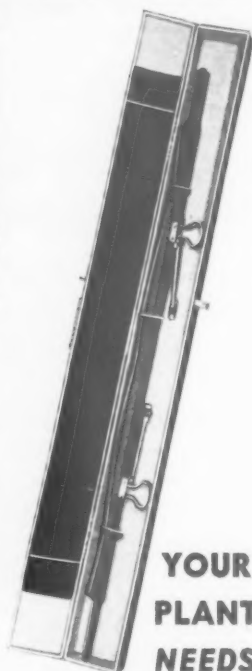
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JUNKIN STRETCHERS

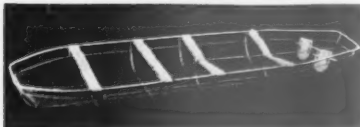
STRETCHER CASE

\$2380 FOB
Louisville



**YOUR
PLANT
NEEDS
STRETCHERS**

The Junkin Stretcher Case affords a convenient and compact cabinet for storing the army type stretcher, blankets and first aid equipment. It provides a definite location for the equipment and protects it against the deteriorating effects of dirt and grime. And because it's compact it's a SPACE SAVER tool. Comes fully equipped if desired.



JUNKIN SPLINT-TYPE STRETCHER

Construction permits patient to be carried horizontally or lifted vertically without danger from inaccessible locations. Canvas straps and footrests keep patient rigid and comfortable. For complete information write for free descriptive literature.



JUNKIN

SAFETY APPLIANCE CO.
101 S. FLOYD ST.
LOUISVILLE 2, KENTUCKY

had lost their eyesight according to the script. They were then taken through a typical first day of readjustment to blindness.

The show, which was tremendously impressive, was sponsored by the Eastbay Chapter, N.S.C., with the help of Dr. Harold Gates, a Richmond optometrist.

Office Hazards

When NSC Awards of Honor were presented recently to two large industrial companies on the West Coast, one in California and one in Oregon, it was brought out that the long injury-free records had come to an abrupt end because of office accidents, the victim in each case being an office worker. In one case a stenographer tripped over a telephone wire; in the other, a clerk stumbled over a file drawer.

Cincinnati Manager Resigns

Kenneth R. Miller, executive director of the Greater Cincinnati Safety Council, has resigned to become president of the Ohio Mechanics Institute which is a substantial engineering school in Cincinnati. His resignation is effective July 1. His successor has not as yet been announced.

Mr. Miller was chosen as manager of the safety council when it was organized some years ago and through his capable administration the organization has grown steadily in leadership, finance and activities. His many friends in the community safety field, while regretting to see him leave the council, join in extending best wishes and congratulations on this fine promotion.

Philadelphia Meeting

Nearly 5,000 delegates from Eastern Pennsylvania, New Jersey, Delaware and Maryland attended the 20th annual Philadelphia Regional Safety and Fire Conference and Exhibit March 10 and 11 at the Bellevue-Stratford Hotel, Philadelphia.

The Conference was sponsored by the Chamber's Safety Council, the Philadelphia and Delaware County Chapters, American Society of Safety Engineers, the Pennsylvania Manufacturers Association and 30 participating agen-

cies. There were over 100 speakers, 32 sessions and 57 exhibits. The luncheon speaker on the opening day was Ned H. Dearborn, president of the National Safety Council.

New Manager for San Diego

David Thompson has been appointed executive director of the San Diego County Traffic Safety Council, succeeding Lisle Shoemaker who resigned recently to become assistant to the publisher of the *Los Angeles Daily News*.

The new manager of the council has been for the past eight years, public relations director of the San Diego City and County Visitors Bureau. He did public relations work for Consolidated Vultee Company for one year and spent two years with the National Youth Administration for Indiana prior to coming to the West Coast. He is a journalism graduate from Butler University, Indianapolis. He was a Naval lieutenant (senior grade) during World War II.

It's NEW NO-FOG CLEANING TISSUES

Trade Mark Reg. U. S. Pat. Off.

Used to clean and no-fog eye glasses, goggles and welding lenses. Tissues are chemically treated.

NO LIQUIDS TO BUY USE ONLY WATER

Tissues can be used several times. Contact your nearest Jobber or write us direct for samples and literature.



JOBBER WANTED

Mfg. by
CARHOFF COMPANY
11706 Kinsman Road
Cleveland 20, Ohio

Calendar Contest Winners for March

First prize in the National Safety Council's Safety Calendar Contest goes this month to James R. Ross, American Oil Co., West Haven, Conn. The theme in this contest was stop accidents—allow a margin for safety. Mr. Ross' line was adjudged the best of all those submitted. It was:

Stay well back—have the slack to stop shy!

Second prize went to Raymond W. Bursey, Dominion Steel & Coal Corp., Wabana, Newfoundland, Canada, for this line:

First safety—then brakes should apply.

Third prize was awarded to Mrs. Ted Pinkston, Oklahoma Gas & Electric Co., Drumright, Okla., for the following line: *Howe knew how, but not when, which is why—!*

The March limerick was:
*Andy Howe was an average guy,
Who with average driving got by—
Till he tried to stop quick
When the pavement was slick*

Thirty \$5 awards were issued to:

Floyd Snyder, janitor, Bethlehem Steel Co., Bethlehem, Pa.

William G. Kurtz, cable splicer, Commonwealth Edison Co., Chicago, Ill.

Mrs. Edna Trevillian, Lodi, Calif. (Individual Member)

PFC Charlotte Ayers, Woman Marine Company, Camp Lejeune, N. C.

Mrs. Jewel Wilson, Ecusta Paper Corp., Pisgah Forest, N. C.

Gary V. Meyer, principal, Mt. Calvary Lutheran School, Omaha, Nebr.

Mrs. F. A. Niver, Omaha, Nebr. (Individual Member)

Mary Carter, Indianapolis, Ind. (Individual Member)

Mrs. Harold Landes, Indiana & Michigan Electric Co., Mishawaka, Ind.

Mrs. Faith Elder, Niantic, Ill. (Individual Member)

Mrs. Emmett Swan, Minonk, Ill. (Individual Member)

Mrs. E. T. Zimmer, Consumers Power Co., Battle Creek, Mich.

Louis E. Palfy, Minneapolis, Minn. (Individual Member)

Mrs. Margaret B. Collins, Bradford City School District, Bradford, Pa.

L. C. Lester, St. Regis Paper Co., Kalamazoo, Mich.

Mrs. Mildred S. George, Eli Lilly & Co., Indianapolis, Ind.

Edward Morrissey, Delaware and Hudson Railroad Corp., Albany, N. Y.

Ivan L. Herring, Dow Chemical Co., Midland, Mich.

Mrs. Violet Hagenbuch, St. Regis Paper Co., Nazareth, Pa.

Mrs. William Burke, Oliver Iron Mining Co., Biwalick, Minn.

Alexander Campbell, General Motors Corp., Detroit, Mich.

Hannah L. Miller, Philadelphia, Pa. (Individual Member)

E. T. Middleswarth, Pittsburgh Plate Glass Co., Creighton, Pa.

Mrs. C. H. Bowlen, Haverhill, Mass. (Individual Member)

Mrs. Ernest M. Grider, Allison Division, General Motors Corp., Indianapolis, Ind.

George Gambler, Bethlehem Steel Co., Bethlehem, Pa.

Sally Goodall, The Texas Co., Beacon, N. Y.

Hap Herleman, Alpha Portland Cement Co., Martins Creek, Pa.

L. Pryor, Longlac Pulp & Paper Co., Ltd., Terrace Bay, Ontario, Canada.

Mrs. Ethel Muhvich, Diamond Alkali Co., Edgewood, Md.

Experience is the thing that causes a man to make new mistakes instead of repeating the old ones.

Nothing makes temptation so easy to resist as being broke.

Poise is the ability to be ill at ease naturally.

APRONS THAT PROTECT



- Flame Resistant
- Acid Resistant
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OTHER SAFETY FIRSTS

Welders' Curtains, Gloves, Hand Pads for Steel and Glass Handlers.

ALL BASCO—QUALITY PRODUCTS

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Write for Samples and Prices.

**ASSOCIATED
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Protect your men's feet!



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USE ŌNOX Skin-Toughener to stop Athlete's Foot and increase production

✓ NO TROUBLE TO USE

No splash, no mess, easy to maintain. Nothing to get out of order.

MAKE 60 DAY TEST

We will ship trial order for any amount of ONOX and footmats. You pay nothing unless fully satisfied after 60 day test.

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Main cause of

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Shoe - Softened Skin

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ONOX mineral salts toughen soft skin and make it resistant to fungus growth.

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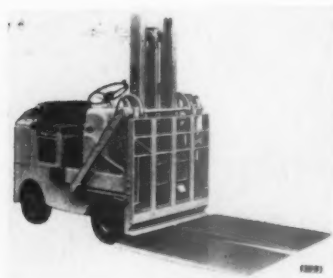


NEW SAFETY EQUIPMENT for INDUSTRY

Manufacturers are invited to send in announcements of new products, or improved special features. Only items which can be considered as "news" to our readers will be published.

Loading Pallets

A new handling device, called the Tow-Loader, makes it possible to use thin pallet sheets in handling unit loads. With a gripping device built into the pusher frame, the Tow-Loader pulls the palletized load



onto either blades or forks and pushes it off at set-down points.

Through the use of this loader at both shipping and receiving ends, pallet loads can be loaded, shipped and unloaded swiftly at minimum cost. Once the unit loads have been placed on the pallet sheets, all further handling operations by the Tow-Loader are completely mechanical. **Towmotor Corp., 1226 E. 152nd St., Cleveland 10, Ohio.**

Item No. 1.

Noise Control

A new approach to the problem of industrial noise by use of economical, small,

portable, lightweight sound absorbing units known as Sonosorbers. These units have inner cores encased in perforated stucco embossed aluminum and are light weight, about 2½ pounds, and are easy to clean. They are designed for noisy industrial and commercial locations where acoustical treatment is not applicable.

Sonosorbers are said to have high noise absorption value in both high and low frequencies. They are volume absorbers with absorption areas larger than their physical dimensions in certain frequencies. Being placed in the intense sound area, their physical structure tends to break up sound waves, attract and absorb or drain the sound due to diffraction. **Sonosorber Corp., 21 S. 16th St., East Orange, N. J.**

Item No. 2.

Portable Dust Bin

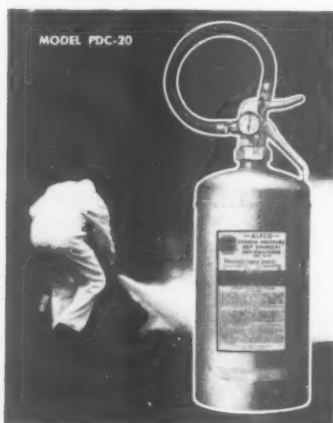
A portable dust bin is now available as optional equipment for Model 219 twin cyclone dust separator. It is intended for use where large volumes of dust require frequent emptyings of the dust reservoir for disposal or salvage.

Use of this bin requires that the Model 219 unit be mounted on legs and equipped with a hopper bottom. From this hopper a 12-inch diameter air-tight flexible sleeve leads to a specifically designed lid that fits onto the bin with quick acting clamps. It is claimed this portable dust bin reduces the down time required to change dust bins.

Torit Manufacturing Co., 291 Walnut St., St. Paul 2, Minn.

Item No. 3.

Hand Portable Extinguisher



A new line of air pressurized Alfco dry chemical fire extinguishers which consists of Models PDC-5, 10, 20 and 30 is a new development. To operate these extinguishers, simply pull pin and squeeze lever. Their fire-smothering efficiency is aided by a scientifically designed discharge nozzle which fans the dry chemical outward and downward in wide pattern and with great density. Their 150 psi. air pressure maintains uniform duration of the dry chemical discharge pattern.

When partially operated, they can be left standing without loss of air pressure, should a fire relapse before the extinguishers are recharged.

American-LaFrance-Foamite Corp., Elmira, N. Y.

Item No. 4.

Multi-Use Pliers

Ampco's new long-nose multi-use pliers are made entirely of Ampco Metal, a special bronze alloy which is spark resistant,



and corrosion resistant to most acids. **Ampco Metal, Inc., 1745 S. 38th St., Milwaukee 46, Wis.**

Item No. 5.

Cleaning Tissues

The Carhoff Co. announces their No-Fog cleaning tissues for eye glasses, goggles, glass in welders' head and hand shields, windshields, camera lenses, etc. It is said the product works equally well on glass or plastic and that it will clean grease or grime from glass as well as prevent fogging. The tissues are chemically treated; are strong, soft and pliable and will not scratch glass surfaces.

The Carhoff Co., 1706 Kinsman Rd., Cleveland, Ohio.

Item No. 6.



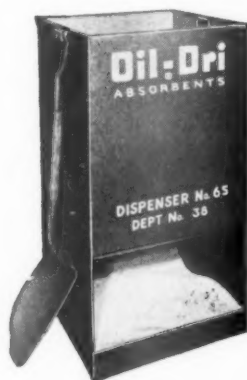
NEW SAFETY EQUIPMENT for INDUSTRY

Further information on these new products and equipment may be obtained by writing direct to the manufacturer or by circling corresponding item numbers on Reader Service Postcard.



Oil Absorbent Dispenser

Oil-Dri absorbents may be instantly available with a new dispenser which is made of solid steel with 150 lb. capacity. Design is rugged and simple. There are no



parts to adjust. Its operation is based on a slot-type release which automatically drops absorbents to the floor of the dispenser where it can be scooped up in the desired quantity to clean an oil spill. The unit is equipped with a side bracket for scoop or shovel. A screen mounted on the top of the dispenser enables the absorbents to be reused. Pouring sweepings from the floor back through this screen, filters out steel chips, and other foreign materials, while the absorbents drop back into the dispenser.

Oil-Dri Corporation of America, 520 N. Michigan Ave., Chicago 11.

Item No. 7.

Adjustable Lamp

The new Luxo Lamp model L-3 has the added advantage of an extra arm, giving a total radius of 60 inches, and is especially useful in places where it is necessary to shift the light to different spots over a wide area. Flexing arrangement provides a fixed, free-swinging horizontal member, joined to twin medium length extension arms, which makes it instantly responsive to light concentration requirements of assembly line production and wall-table stations.

Luxo Lamp Corp., 290 Madison Ave., New York 17.

Item No. 8.

Towel Bin

Safeway towel and oily rag bin is one of the safe methods for disposal and replacement of towels and oily waste rags. One section of the bin is used for clean towels or oily waste rags. The opposite section holds the soiled towels or oily rags.

These bins are sturdily constructed of



heavy gauge galvanized iron and reinforced by angle iron with tubular riveting throughout. The fusible link melts in the event of fire, and the cover closes automatically. J. D. Polis Manufacturing Co., 2900 W. 26th St., Chicago 3.

Item No. 9.

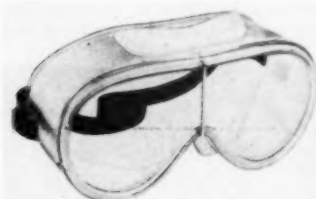
Goggles

The new Model 492 "Stac-Vent" goggle for welding combines comfort with lower



cost protection. "Stac-Vent," a new principle of goggle ventilation, prevents fogging and provides draft ventilation at the top and center of the goggles where warm, moist air normally accumulates. Large openings for ventilations are shielded by the "Stac-Vent" hood. The opaque black soft vinyl plastic frame, large enough to fit over all prescription glasses, form-fits the contours of the face and nose, leaving no gaps. A heavy, opaque lens holder has lens pockets for replaceable 50 mm round, glass filter lenses, protected both inside and outside by a hard plastic cover lens.

Three other models of this goggle are available for stand-by protection in welding areas. Model 490 SV has a black opaque frame with a large, one-piece, shatterproof,



optically correct Methacrylate lens. Model 442 "Stac-Vent" has a transparent soft vinyl frame with a transparent lens holder for 50 mm round, hardened safety glass protected with an acetate inside cover lens to prevent shattered glass from penetrating the eyes in case of impact.

Watchemoket Optical Co., 232 W. Exchange St., Providence, R. I.

Item No. 10.

Cleaning Agents

Oakite Composition No. 93 is specifically designed for use in steam-generating equipment and in steam guns where the solution is siphoned from an auxiliary tank. The material, the manufacturer reports, has been approved by the U. S. General Services Administration, appearing on the qualified products list as meeting Federal Specification—Steam Cleaner—P-S-00751.

The composition is a white, free-flowing powdered material which is readily soluble in water in a broad range of concentrations and use. The manufacturer states



NEW SAFETY EQUIPMENT for INDUSTRY

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it possesses exceptionally high sequestering ability and, when added to water up to 20 grains hardness, will show no precipitate or turbidity. Solutions of this composition are non-toxic and safe and pleasant for steam gun operators to use. No offensive odors or fumes are given off.

Oakite Products, Inc., 114D Rector St., New York 6.

Item No. 11.

Plastic Panes

Explosion-vent windows of extruded Tenite butyrate plastic are new aids to industrial safety. In the event of a blast caused by the sudden ignition of gas or air-borne dust, the flexible plastic panes will bow and pull away from the casings to effect a quick release of pressure. Their release is so fast that the possibility of an



excessive pressure build-up, sufficient to blow out walls or window frames, is said to be eliminated. The tough panes will not shatter.

The new glazing material is transparent and has a horn-like toughness characteristic of the butyrate plastic from which it is made. The panes are cut to size from extruded sheet. Thin galvanized strips are crimped over all four edges of the tough plastic sheets, providing a metal binding $\frac{3}{8}$ inch wide. Tenite butyrate plastic is marketed by Eastman Chemical Products, Inc. Information regarding the Tenite panes is available from the manufacturer:

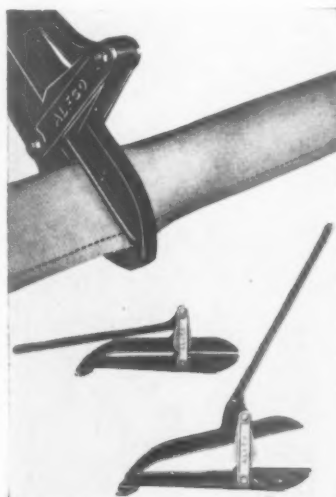
General Plastic Co., Marion, Ind.

Item No. 12.

Hose Shut-Off

The 3-in-one hose shut-off device can be used effectively on $1\frac{1}{2}$ ", $2\frac{1}{2}$ " and 3" double-jacket fire hose. It can be switched from one hose line to another without adjustment. The device can be used for the following purposes: For quick shut-off of hose line; taking out and replacing

broken lengths of hose; adding hose to a charged line; changing a nozzle; connecting a Siamese, cellar nozzle or standpipe



or draining a hose line for carrying up a ladder. The unit is made of steel, with weather-resisting painted finish.

American-LaFrance-Foamite Corp., Elmira, N. Y.

Item No. 13.

Respirator

A new respirator which protects the wearer against toxic dusts as well as organic vapors is known as the MSA Comfo



chemical cartridge respirator, which employs static-web dust filters which clamp on the respirator's twin chemical cartridge filters. The dust filter is made of charged, resin-treated felt which promotes electrostatic retention of dusts and supplements mechanical filtering action.

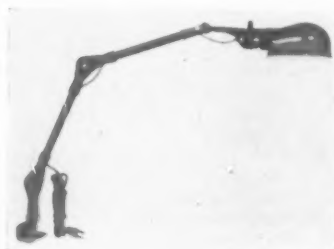
The manufacturer points out that there are many working areas in which dust and vapor hazards are encountered simultaneously and cites, as an example, operations where workmen are exposed to volatile dusts. This new respirator, they say, extends breathing protection to all exposed to hazards in such areas.

Mine Safety Appliances Co. Braddock, Thomas & Meade Sts., Pittsburgh 8, Pa.

Item No. 14.

Localite Models

Many new features have been incorporated in the new 1954 Fostoria Localite line for lighting machine tools, inspection uses and assembly benches. Arm joints are of new patented tension disc design providing easy, smooth adjustability with only



one hand. Reflectors, available in several new designs, rotate 360° . A new universal base provides for either vertical or horizontal mounting and is also adaptable to outlet boxes. All are listed by Underwriters' Laboratories, Inc.

The Fostoria Pressed Steel Corp. Fostoria, Ohio.

Item No. 15.

Methane Indicator

National Mine Service Company has been appointed exclusive distributor in this country for the U. S. Bureau of Mines approved Riken Methane Indicator. Embodying the principles of optical projection in the determination of methane content in mine air, the instrument enables

NEW SAFETY EQUIPMENT for INDUSTRY

Further information on these new products and equipment may be obtained by writing direct to the manufacturer or by circling corresponding item number on Reader Service Postcard.



one without special training to make readings in less than a minute accurate to within one-tenth of one per cent. The direct-reading scale ranges from 0.0 per cent to 6.0 per cent.

A single-cell flashlight battery and bulb for illumination of the scale and a replaceable absorbent cartridge to remove mois-



ture from the air sample are the only renewable items. No combustion of gas sample on a hot wire, no re-calibration, no dependence or connection with a cap lamp battery of varying voltage simplifies operation and secures results comparable with laboratory equipment.

The indicator weighs only 2½ lbs. and measures 7½ x 3½ x 1½ inches.

National Mine Service Co., P. O. Box 32, Beckley, W. Va.

Item No. 16.

Exhaust Silencer

A line of high velocity steam and air exhaust silencers, designed to set new standards in noise control in critical and non-critical areas has been developed by the Burgess-Manning Co., manufacturers and inventors of industrial noise abating devices.

The new line is known as Series "ADS" acoustic discharge silencers. They are designed to eliminate high and low frequency noises caused by high velocity discharge from steam and air devices. They operate on the snubbing principle and employ especially designed acoustic reactance chambers plus special sound absorbing material.

The new silencers are for use on steam vents, steam safety valves, hogging jets, gas turbines, air nozzles, evacuating ejec-

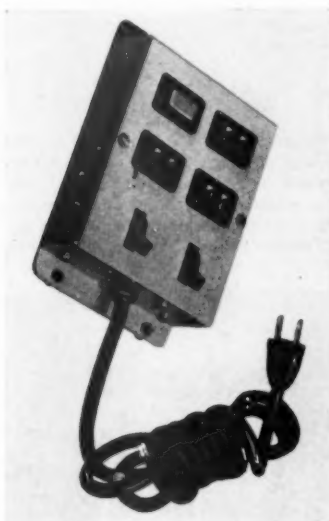
tors and similar devices discharging high velocity steam and air into the atmosphere.

Burgess-Manning Co., Libertyville, Ill.

Item No. 17.

Portable Outlet Box

The new portable outlet box with toggle switch controls is a needed convenience where multiple electrical outlets are desired. It is wired complete with three outlets, one hot, two controlled by toggle switches, rated 10 amperes at 125 volt



AC-DC. Red signal light illuminates when plugged in. The 18-gauge steel case is supported on four rubber feet and equipped with a 6-ft.-two conductor rubber covered cord with molded rubber two-prong plug.

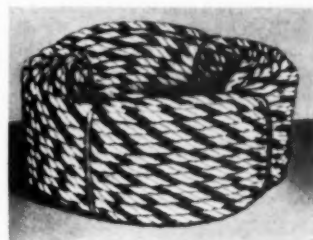
The Fostoria Pressed Steel Corp., Fostoria, Ohio.

Item No. 18.

Plastic Barrier Rope

Triple strand of polyethylene plastic, two strands of yellow, one of black, give this plastic barrier rope high visibility. Effective in that it carries out the standard caution colors and immediately identifies a restricted area. Known as Ipcor Poly-Rope, which is 5/16" diameter, it finds many uses for making up barricades around electrical equipment, plant maintenance work, roping off test areas, work areas on

the streets and highways, building projects,



tree trimming operations and also for use in chemical plants where presence of acids and other corrosive materials exist.

Industrial Safety Products Co., 2850 N. Fourth St., Philadelphia 33.

Item No. 19.

Floor Wax

Saf-Flor wax is made with a rubber base for which the manufacturer claims slip-resisting qualities, even when the floor is wet. It is also claimed to be long-wearing, has no discoloration and shines without polishing.

E. J. Scarry & Co., 1620 Market St., Denver 2, Colo.

Item No. 20.

Safety Harness

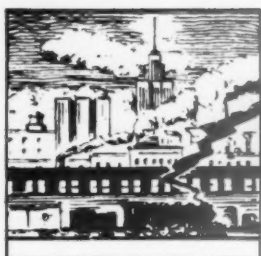
The Bashlin standard safety harness shown here is made of Bashlin cotton webbing sewn with nylon thread. It is impregnated to give protection against oils, acids and many other chemicals. Forged



hardware and hand set copper rivets are used throughout. For men working in man-holes, gas tanks, underground lines, roofings, boilers, etc., it is, in many cases, a safety requirement.

W. M. Bashlin Co., Grove City, Pa.

Item No. 21.



NEW SAFETY EQUIPMENT for INDUSTRY

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Electric Fork Trucks

Underwriters' Laboratories-approved electric carloader series fork trucks for operation in hazardous areas covered by Underwriters' Class I Group D classification, in capacities from 3,000 to 5,000 lbs., are now available from Clark Equipment Co.

These carloaders have an "EX" truck rating, which means that they have been approved for operation in atmospheres containing explosive vapors such as gasoline,



petroleum, naphtha, benzene, butane, lacquer solvents, natural gas, etc. To prevent spark-jumping, sealing Unilets or boxes are inserted at various points in the circuit, such as between plug and battery, master switch and panel, panel and seat brake, panel and resistor, panel and foot-brake switch and valve limit switches. These boxes are packed with special material that absorbs and snuffs out any sparking. Clark Equipment Co., Battle Creek, Mich. Item No. 22.

Parts Washer

A compact, portable air-powered parts washer provides a safe method for the

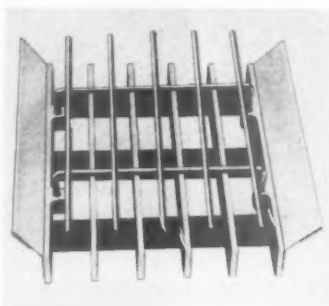


speedy, economical cleaning of small parts, pieces and sub-assemblies. It consists of a leak-proof, electrically seam-welded safety container with a fusible link in the cover and contains a perforated basket for the parts. The cleaning solvent is placed in the container and the basket holding the parts is moved up and down through the solvent by a reciprocating air motor which operates on a compressed air supply to avoid the possibility of igniting flammable vapors by sparks from electrically powered equipment. The movement of the basket through the solvent reduces to a minimum the release of flammable vapors. The Protectoseal Co., 1920 S. Western Ave., Chicago 8.

Item No. 23.

Magnetic Separator

Designed to be placed in hopper throats or floor openings, Homer magnetic grates are said to trap small and elusive tramp iron particles, preventing their entrance into expensive machinery and causing product contamination. The separator consists



of a wire grid with horizontal rods placed between highly saturated Alnico No. 6 magnetized bars. The horizontal rods deflect free flowing material into streams which wipe the magnetized bars. It is said there is little chance for the smallest particle of iron or steel to escape this powerful magnetic attraction.

The Homer Manufacturing Co., Inc., Dept. 199, Lima, Ohio.

Item No. 24.

Chain Hoist

The new Ampco one-ton chain hoist was developed to meet the demand for a non-magnetic, spark-resistant hoist for use in locations where ferrous materials would be unsuitable.

This hoist is of the spur gear, ball bearing type incorporating the best features found in hoists of that type. With the exception of a few non-metallic parts and



ball bearings of Monel, the entire unit is constructed with Ampco special copper-brass alloys.

The hoists are recommended for use in hazardous areas where a spark might cause an explosion and where corrosion might result from direct contact with liquid or fumes. The magnetic permeability of the Ampco materials of construction is low and they are generally classed as "non-magnetic" and as a result, the hoists are specified by the Navy for minesweeper service.

Ampco Metal, Inc., 1745 S. 38th St., Milwaukee 46, Wis.

Item No. 25.

Stair Tread

Called the "Stairmaster," this tread is a permanent extruded lightweight aluminum alloy base in a standard 9 inch depth.



The Stairmaster is furnished in lengths as required so that no cutting is necessary, and the treads can be easily installed over

NEW SAFETY EQUIPMENT for INDUSTRY

Further information on these new products and equipment may be obtained by writing direct to the manufacturer or by circling corresponding item number on Reader Service Postcard.



worn stair treads after existing tread has been leveled with mastic. The tread has 11 rows of firmly embedded safety ribs containing diamond hard abrasive grains that provide anti-slip protection. The tread is easily applied on all types of stairs, such as wood, concrete, slate and marble. It is lightweight, rust-proof and suitable for exterior or interior stairs.

Wooster Products, Inc., Dept. S, Wooster, Ohio.

Item No. 26.

Cleaner-Disinfectant

It has been announced that Just, a combination cleaner-disinfectant, deodorant and sanitizer, has been accepted by the Bureau of Animal Industry of the United States Department of Agriculture as acceptable for use in federally inspected packing



plants. It is claimed that Just cleans, sanitizes and disinfects in one operation. It contains an effective agent and is said to eliminate odors caused by mildew and moldspores as well as by decomposition of organic material.

Fuld Brothers 702 S. Wolfe St., Baltimore, Md.

Item No. 27.

Drum Lifters

It is claimed that the drum lifters attached to a 2-part chain sling as illustrated can be quickly attached and detached and convey 4 drums in one lift. Each drop forged individual drum lifter has a rated safe working load of 1,000 lbs. so that the complete unit with "2-part slings" will lift

two tons with a liberal safety allowance. The lifter is equally adaptable on drums



where the head is in place or removed for holding manufactured items or waste material.

Merrill Brothers, Arnold Ave., Maspeth, N. Y.

Item No. 28.

NEWS ITEMS

Pennsylvania Optical Co., Reading, Pa., manufacturers of head and eye protective equipment, has announced the following appointments:

Edward L. Clark to serve the Cleveland area with headquarters at 6318 Thornton Dr., Parma 29, Ohio. Formerly safety director of Edgewater Steel Co., Mr. Clark is a member of the American Society of Safety Engineers.

Robert Speidel to serve the Detroit area from his headquarters at 22150 Westhamp-ton Ave., Oak Park, Mich. Mr. Speidel has had broad experience in the safety field, and is a graduate of Fenn College.

Montgomery Elevator Co., Moline, Ill., announces the purchase of the Elevator Accessories Division of Richards-Wilcox Manufacturing Co., Aurora, Ill. With the acquisition of this line of elevator accessories, Montgomery now makes available to the trade a complete line of elevator components consisting of high-speed elevator door operators, elevator door hangers, door closures, interlocks, and modern elevator signal devices and equipment. All operations will be moved to new facilities in Moline.

Albert W. Pendergast Safety Equipment Co. has been appointed Philadelphia regional distributor for Beryllco non-sparking safety tools produced by the Beryllium Corp., Reading, Pa. The company, located in 6913 Tulip Street, Philadelphia, will serve customers not only in metropolitan Philadelphia, but also in Delaware, southern New Jersey and Pennsylvania east of Williamsport.

Don O. Wood, executive vice president and general manager of the Fyr-Fyter Company since 1948, was elected president of the Fyr-Fyter Co. and a member of its board of directors. Mr. Wood joined Fyr-Fyter 31 years ago. Starting as office



boy, he progressed through the company's service and sales divisions, serving both as service and sales manager over a number of years.

Establishment of a Mexican subsidiary has been made by Walter Kidde & Co., Inc. (Belleville, N. J.). Operating under a charter from the Mexican government, the new subsidiary will receive parts from the parent company as well as from local sources. It will assemble, charge, test, paint, and ship Kidde fire extinguishers to Mexican distributors, will maintain repair and recharging facilities, and will service the company's industrial fire detection and extinguishing systems.

John F. Kidde is president of the new subsidiary and Carey H. Nelson is vice president and general manager. Mr. Nelson is also president of Kidde Sales and Service, Inc., of Houston, Texas. Offices of Walter Kidde de Mexico, S. A., are located at Calle de 13 PTE 330, Santa Maria Insurgentes, Mexico City, D. F.



NEW SAFETY EQUIPMENT for INDUSTRY

Manufacturers are invited to send in announcements of new products, or improved special features. Only items which can be considered as "news" to our readers will be published.

William J. Carroll, president of Rockwood Sprinkler Co., announced the appointment of Donald A. Knapp as sales engineer for the Portable Fire Fighting Equipment Division. Mr. Knapp holds a Bachelor of Science degree in Electrical Engineering. He attended the University of California and Stanford University. As a member of the Board of Fire Underwriters of the Pacific in San Francisco,



California, Mr. Knapp served as policy examiner and assistant chief engineer in the Sprinklered Risk Department. In 1941, he was employed in the insurance department of Bethlehem Steel Co., where he undertook such duties as determining specifications of equipment purchased for fire protection, the developing of fire department training programs, and the testing of new and specialized types of fire protection equipment. Mr. Knapp's territory will cover New York and northern New Jersey.

The Albert W. Pendergast Safety Equipment Co., Philadelphia, distributors of industrial safety equipment, is now celebrating its tenth anniversary. The company, having outgrown its original quarters, recently moved to larger offices and warehouse at 6913 Tulip Street, Philadelphia.

E. W. Bullard who for the past three years has been the United States sponsor of the Turtle Club has been appointed as International Sponsor by C. R. Rustmeyer, founder of the organization and safety director of Forest Products Limited. Vancouver, B. C. The Turtle Club is an organization made of men who would be dead if they had not been wearing safety hat or cap at the time of an accident. The membership is open to anyone whose life has been saved by head protection. Copies of the constitution and by-laws and application blanks for membership may be se-

cured from E. W. Bullard, Turtle Club Headquarters, 275 Eighth St., San Francisco.

Garvin A. Drew has recently been appointed vice-president of Scovill Manufacturing Co., Inc., in charge of sales, service, advertising and sales promotion for A. Schrader's Son Division.

Mr. Drew received his S.B. degree from M. I. T. in 1925, joining the Schroder organization in the same year. He earned his Master's degree in Business Administration at New York University in 1928.



Following his initial training in manufacturing methods at the Brooklyn plant, he became a salesman in the Detroit area, and after several other assignments was appointed to Pacific Coast manager in 1935. Five years later he was recalled to Brooklyn and made general sales manager.

Conrad Richard Seim has been appointed western representative of The Protectoseal



Co., Chicago, manufacturers of safety devices for hazardous liquids, with offices and warehouse stocks in Los Angeles.

Mr. Seim is well known to many plant men and officials in the industrial district

of the west coast where he has been active in sales work as a tool engineer and consultant. This sales experience has brought him into contact with the production methods of many types of manufacturing.

R. C. Mills, treasurer and purchasing agent of the E. D. Bullard Co., San Francisco, has announced the appointment of R. Phillips Barker as office manager and assistant purchasing agent.

Mr. Barker, a life long resident of the Bay area, graduated from the University of California in 1938. A lieutenant commander in the Navy, he resigned his commission in 1949 and returned to the Federal Reserve Bank of San Francisco where he had been employed prior to his entry into the Navy in 1941. He joined the Bullard organization in 1953.

NFI Publishes New Supervisor's Service

The National Foremen's Institute has recently brought out a documentary service publication for supervisors called Problems With Employees—a first in its field.

Taking a group of typical, true grievance cases which had actually gone to arbitration, Problems With Employees presents the cases factually, gives the arbitrator's decisions in his own words, comments editorially on each case separately.

The first two issues treat such cases as: disrespect and abuse of supervisor; repeated intoxication; refusal to take orders; fighting in plant before shift time; theft of company property; refusal to work with assigned partner; refusal to work certain religious days; handling of probationary employees. The cases are clearly presented so that a file of successive issues should make valuable reference material. Knowing how similar grievance cases have been settled in other companies could conceivably save a supervisor's own company time, money and headaches.

TRADE PUBLICATIONS IN THE SAFETY FIELD

These trade publications will help you to keep up-to-the-minute on new products and developments in industrial health and safety equipment. They are free and will be sent by manufacturers without obligation to readers of NATIONAL SAFETY NEWS who are responsible for this work. Circle publications desired on Reader Service Postcard.



1. **Quik-Lift Electric Hoists:** A new, six-page bulletin describes and features Quik-Lift electric hoists. Included in the bulletin are performance and safety features, cut-away drawings showing details of construction, together with complete specifications and dimensions of all 17 Quik-Lift models from 500 to 4,000 pound capacities. Coffing Hoist Co.

2. **Gas Mask:** A special gas mask for welders is the subject of this 2-page bulletin. Both dust and fume canister and compressed air supply may be used with the mask, which has large, wide vision lenses to permit the welder to see adequately while protected. Acme Protection Equipment Co.

3. **Safety Treads and Thresholds:** A 12-page catalog shows a complete variety of treads and metal in which they are available. Full size cross-sections are illustrated. The safe groove and abrasive cast treads; extruded cast and abrasive thresholds and miscellaneous accessories such as plates, curb bars, window and elevator sills, etc. Wooster Products, Inc.

4. **Adjust-A-Dock:** An illustrated bulletin describing its manual floating 20,000 pound capacity hydraulic adjustable ramp, designed to bridge loading platforms with highway truck beds. Included are operating and design details and specifications. Rowe Methods, Inc.

5. **"How to Get More Work Out of Your Wire Rope":** Seventeen life-saving tips for improving wire rope service are given in this new folder. Suggestions for correct handling and storing, and recommendations for proper use of rope are included. H. K. Porter Co., Inc.

6. **Electric Brakes and Clutches:** A new catalog describes a line of small electric brakes and clutches. Electrically actuated, they're ideal for accurate indexing, inching and jogging, rapid cycling, synchronized starting and stopping, and numerous other motions requiring adroit engagement and release. Warner Electric Brake & Clutch Co.

7. **Chain Hoists and Trolleys:** Bulletin H-32 describes and illustrates all types of hoists from 1/4-ton up to 25-ton capacity. The bulletin includes descriptions as well as condensed specifications. Harnischfeger Corp.

8. **"There's a Right Ladder for Every Job":** This pamphlet is a digest of things you should know about ladders. Various subjects are discussed in this folder such as "What the U. S. Department of Agriculture, Forest Service, Recommends About Ladders," "How to Select the Ladders You Need," and "Care and Use of Ladders." American Ladder Institute.

9. **Safer Solvents:** Bulletin describes two types of safer solvents, slow and fast drying liquids designed to clean electrical and equipment parts. Features emphasized include high flash points, minimized toxicity, dermatitis, freedom and ability to remove grease and oil without damage to surface

or materials of construction. Fine Organics, Inc.

10. **Safety Tank Car Platform:** Literature describes this new unloading platform which eliminates dangerous hazards of working on slippery tank car tops and cuts waste and mess of bottom unloading. Developed especially for railroad, chemical and petroleum companies. Nichols Engineering Co.

11. **"Look Into These Facts About Dockboards":** Featured in this fact file is the company's magnesium alloy dockboard. Light enough to be lifted by one man. Hand holds for moving, curbs and safety treads for protection against slips, beveled edge to fit floor and chemically resistant coatings are also listed as special qualities of the device. Magnesium Company of America.

12. **"Du Pont Color Conditioning":** This 32-page booklet is a plan for making the best use of color in industrial painting. Illustrated in several colors, the booklet also suggests colors of paint to buy, and describes the use of color in safety. E. I. du Pont de Nemours & Co., Inc.

13. **Plant Protection:** Folder describes the Guardsman Watchlock System for all plants, also gives instructive information to guide watchmen, guards and management. Detex Watchlock Corp.

14. **Aluminum Ladders:** Catalog 53 describes, illustrates and lists a line of straight and extension ladders, platforms, trestles, planks and stages, as well as ladder accessories. Specifications and suggestions on the proper care and use of equipment. Louisville Ladder Co.

15. **"Timmins Splint":** Pamphlet describes the new Timmins splint for rescue work and first aid. It gives complete immobilization to the injured arm, leg, back, neck or other member of the body, and assures safe removal of the injured party from the scene of the accident. Stephenson Corp.

16. **How to Put Safety on Every Worker's Lips:** Full details on how you can get your safety messages onto your workers' lips every time they drink, by the use of safety slogans on drinking cups. Continental Can Co.

17. **Oily-Waste Can:** Described in this 2-page bulletin is a new waste can designed to contain oily wastes safely. Specifications for 4 different size cans appear in the bulletin. Protectoseal Co.

18. **Safety Shoes:** This multi-colored folder lists and pictures safety shoes with built-in steel toes to fill your specific need. Styles include loafers, moccasins, plain and grained oxfords, ventilated shoes, boots, half boots, moulders' shoes, work shoes, women's shoes and pull-ons. Leather, crepe and types resistant to various hazards are furnished in the soles. Hy-Test Division, International Shoe Co.

19. **"Proper Care of Floors":** A 32-page guide to floor maintenance, this booklet covers cleaning, maintaining and sealing floors. Floor cleaners, sweeping prepara-

tions, sealers and finishers for all types of floors are discussed. Hints on application of floor maintenance products and safety precautions in their use also included. West Disinfecting Co.

20. **Welding Curtains:** Flame and water-proof canvas welding curtains, designed to confine the welding operation to a given area, are discussed in this 2-page, 2-color bulletin. Eyelets permit attachment by hooks or cords for placement. Salvage covers, used to protect equipment from water, dust and snow, are also covered. Frommelt Industries.

21. **Washroom Layouts:** Sixteen blueprint drawings of industrial and institutional washroom layouts are shown in this booklet. Provides a general discussion of washroom planning, also roughing-in data. Bradley Washfountain Co.

22. **"Foam Fire Protection":** A stimulating new booklet in simple question-and-answer style tells what foam is, how it works, where it is used, and what foam devices are used. Basic information relating to mechanical and chemical foam and their devices discussed. National Foam System, Inc.

23. **Safety Hooks:** A hook with a safety gate which locks automatically and will not open unless the pin is manually depressed is but one of the guaranteed safety features of the Safety Hook. The addition of this Safety Gate to a new hook makes it literally impossible for the load to slip off. A 4-page catalog gives full details. E. D. Bullard Co.

24. **Hand Dryer:** Illustrated folder describes and illustrates an electric hand dryer for washrooms. Among advantages listed are rapid drying, no maintenance and cost saving. Specifications are listed and adjustable nozzle for face-drying is illustrated. Chicago Hardware Foundry Co.

25. **"The Answer to Industrial Dermatitis":** The use of a non-irritating gel to protect hands against chemicals causing dread dermatitis is the subject of this book. The softening and deodorizing qualities of the cream are also discussed, but major attention is devoted to the ingredient which kills bacteria and protects the hand against reinfection. Milburn Co.

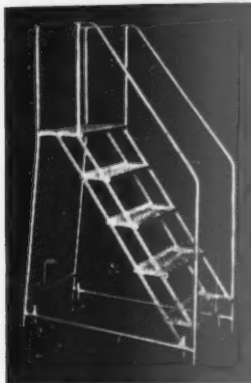
26. **30-50 Automatic Sound Slidefilm Projectors:** Folder describes the new Du Kane sound slidefilm projectors. For both kinds of slidefilm—automatic, a 30-50 cycle inaudible signal on the record automatically advances the film in complete synchronization with the record. DuKane Corp.

27. **"Fire Fighting Products":** 12-page, 2-color catalog describes and illustrates portable fire fighting products and weapons for combating fires in highly volatile flammable liquids and ordinary combustibles. Rockwood Sprinkler Co.

28. **Alloy Steel Chains:** The S. G. Taylor Chain Co. has a new booklet, No. 12-C, giving all the facts and specifications on alloy steel chains. S. G. Taylor Co.

Continued on page 154

COTTERMAN WELDED STEEL SAFETY LADDERS For Filling Rooms—Stock Rooms—Vaults



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New Safety Equipment Section:

On pages 144 to 150 you will find announced the new developments in industrial health and safety equipment. Careful selection is made to bring you only what's new and reliable in the safety field. Each item is identified by a number. Simply circle the numbers in the New Safety Equipment Section of the postcard corresponding to the numbers of the New Safety Equipment items you want to know more about and you'll get the information direct from the manufacturer, without obligation.

Trade Publications Section:

Starts on page 151. Gives brief summary of interesting and helpful trade literature, catalogs, booklets, etc., in the

Industrial Safety Field. You will want many of these for reference. Each publication is identified by number. To get any one of these catalogs or booklets, just circle the numbers in the Trade Publication Section of the postcard corresponding to the numbers of the publications you want, and we will have them sent to you, without obligation, direct from the manufacturer.

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NATIONAL SAFETY NEWS:

MAY 1954

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(Good until August 31, 1954)

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TRADE PUBLICATIONS IN THE SAFETY FIELD

Continued from page 151

29. "The Fork Truck of the Future"—is featured in the Clark Equipment Company's external house organ. Schematic sketches illustrate special details of the new streamlined truck. The new X-70 was built as an experimental model and incorporates many suggestions made by long-time fork truck users. Clark Equipment Co.

30. Conductivity Tester for Hazardous Atmospheres: Bulletin 2-B describes Model 269 Vibrotest and its applications. A newly-designed instrument for measuring conductivity of hospital operating-room floors, ordnance plants, chemical plants, paint factories, refineries, and any other locations where static electricity may be a hazard. Associated Research, Inc.

31. Liquid Level Gages and Valves: 4-page bulletin describes and illustrates liquid level gages, valves and specialties for chemical and petrochemical processing. Jerguson Gage & Valve Co.

32. Emergency Lighting Equipment: The 4-page pamphlet 4808 is designed to assist architects, builders, contractors, executives, engineers and others needing such information, in selection of emergency lighting equipment. Schematic layouts and illustrations of typical emergency lighting installations are supplemented by suggested specifications conforming with sections of the

recently revised National Electrical Code dealing with 6-volt emergency lighting equipment. Electric Storage Battery Co.

33. Steel Reinforced Flooring: A two color bulletin describing many uses and advantages of this new type industrial floor. This new steel-reinforced flooring is specially designed for trucking aisles, loading docks and other similar areas subjected to materials handling equipment and severe abuse. United Laboratories, Inc.

34. Dust Control: How dust can be controlled in industries working with asbestos is discussed in this bulletin No. 412. The illustrated bulletin has four case histories showing how Dustube cloth-type dust collectors are employed to ventilate various dust producing machines in these industries. American Wheelabrator & Equipment Co.

35. Industrial Glove Selector: This newly-designed, compact, pocket-size slide chart industrial glove selector shows at a glance the correct glove for every industrial need by rating the gloves according to their resistance to various kinds of destructive elements. Surety Rubber Co.

36. Stairways: This 92-page catalog describes and illustrates spiral and conventional stairways. Complete with technical data, detail drawings and specifications.

Also available are standard detail sheets to assist in designing and laying out stairways. Woodbridge Ornamental Iron Co.

37. Eye Protection: Brochure describes and illustrates welding helmets, goggles and eyeshields. Goggles for brazing, flame-cutting, welding, chipping and grinding. Light weight face-shields and arc helmets are also treated. Jackson Products, Inc.

38. "Antiseptic Soaps for Industrial Use": This booklet is based on studies of industrial dermatitis, discusses the different causes of this ailment and presents a preventive program employing the use of industrial soaps. Armour & Co.

39. How to Handle Bulk Liquids: This 8-page brochure illustrates and describes the modern way to handle bulk liquids with the new Plaxpak carboys. Made of polyethylene, the bottles are light weight, non-breakable, excellent for shipping all sorts of industrial liquids. Plax Corp.

40. Industrial Vacuum Cleaners: Described in this new bulletin are heavy-duty portable vacuum cleaners of from 1½ to 7½ H.P., including standard electric, belt, and gas-driven units. Special Spencer vacuum tools can reach every spot in the plant—pick up anything from lint to foundry sand and from flour to lead dust, metal chips and water. Spencer Turbine Co.

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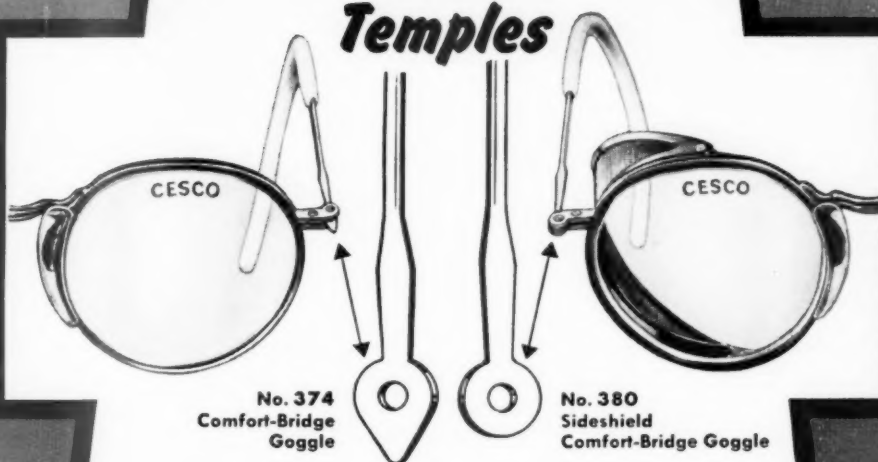
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